INSTITUTE FOR HEALTHCARE IMPROVEMENT

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SUMMARY REPORT: 90-DAY PROJECT

Health Care Economics

July 2008

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II. Intent

Health care represents 16 percent of the United States Gross Domestic Product (GDP) and therefore is a major part of the economy. The focus of this IHI 90-day R&D project is to better understand how health care is viewed from an economics perspective.

III. Background

Since 1970 the national health expenditure rate in the US has grown approximately 2.5 percent faster than the GDP. Despite a decline in recent decades in the rates of growth for both health care spending and GDP, between 1990 and 2004 US health care spending growth outpaced GDP growth 7.1 percent to 5.2 percent.[i] This trend in growth suggests that health care will increasingly account for a larger share of the national economy. The steady rise in health care expenditures has already began to create strain on state and national budgets as government officials scramble to fill budgetary pitfalls created by rising health care expenditures.[ii] A rational argument can be made that the continued growth of health care will eventually lead to some form of a financial crisis.

A significant amount of R&D has been done related to IHI's Triple Aim initiative, much of it focused on how to make the prototyping process successful. Examples include the following:

- Learning at the individual level
- Structure and processes needed to support prototyping
- Predictive modeling
- Primary care redesign
- Waste reduction in specialty practices

During Wave 6 of IHI's R&D process, the R&D work on the Triple Aim was broadened to include identification of economic policy that is needed to support the initiative. During this phase of work we had a number of practical experiences that helped support our thinking about economic policy, including meeting with Stuart Altman and working with John Kitzhaber and Paul Ellwood. The Triple Aim faculty believe that continuing to better understand economic policy will be supportive to the work overall.

IV. Description of Work to Date

1. An outline of general issues around health care economics

- Challenges and successes
- Convergence and divergence among economists

2. Better general knowledge about economic theory and the Triple Aim
3. Provide answers to the following two questions:
   - What is the business model for a Triple Aim-based health care system in the US? (That is, how is value created and how do you pay for it?)
   - What is the role of government, businesses, and other institutions in moving the country toward a Triple Aim-based system rather than health care as we currently know it?
4. Potential identification of an economist to help with the Triple Aim work
5. Decision about the need for an economic conference
6.

V. Results of the 90-Day Scan

Health care economists have various points of view on how to promote efficient use of health care resources. However, many, if not most, assume that "medical care is inefficient and that it fails to produce as much health as it might with the resources it uses."[iii] Newhouse's statement suggests that: 1) resources are not used efficiently; and 2) health care consumers really want health and they demand health care inputs to produce it.[iv] The study of health economics converges around these two observations. Health economists are divided on exactly how to improve efficient use of health care resources, but generally they fall into two camps: those that feel improvements in the efficient use of resources can best be driven by making changes on the demand side of health care (consumers), and those that feel improvements in the efficient use of resources can best be driven by making changes on the supply side of health care (providers).

Demand-Side Levers of Health Care

When considering consumer behavior and potential mechanisms for influencing it, there are two levels to consider. The first is related to direct consumer decisions when purchasing health care services. An example is the decision to have a cosmetic surgical procedure performed. Under this scenario, the consumer makes direct decisions regarding the cost and quality of the service and on choosing a health care provider to perform the service. The second level is related to the decision to purchase health care products such as health insurance. Consumers still make decisions about cost and quality; however, under this scenario the product is not a direct health care service, but rather a tool that gives consumers greater access to health care services.

Consumer choice theory proposes demand-side behavioral assumptions that impact consumer decisions in directly purchasing health care. It is assumed that consumer behavior can be shaped and that the change in behavior will be strong enough to overcome the supplier's ability to compensate for the consumer's changes. It is also assumed that individuals and families are capable of making good consumer choices even when they may be seriously ill. This last assumption is important to consider since the greatest portion of health care expenditures goes towards patients facing serious life illnesses. Specifically, in one year:

- 1 percent of the US population spends 25 percent of all health care resources
- 5 percent spends 50 percent of all health care resources
- 10 percent spends 70 percent of all health care resources
- 20 percent spends 80 percent of all health care resources

In fact, 27 percent of all Medicare funds are spent in the last year of life.[v] Altering demand-side levers to enhance consumers' capacity to make informed health care decisions could shift the distribution of health care expenditures and lower the cost of the system.

Insurance designs such as copays, deductibles, and total out-of-pocket expenses impact the demand for health care services. Health care consumers demand less care when they are responsible for a higher portion of the total out-of-pocket cost. The classic RAND study designed by Dr. Joseph Newhouse demonstrated that higher levels of coinsurance lowered the demand for outpatient medical care.[vi] The study also demonstrated that when the level of coinsurance was set too high, patients used less of both inappropriate and appropriate care. Subsequent studies of the effect of coinsurance on medical care utilization expanded on the work of the RAND study by attempting to isolate which types of services made patients price sensitive without leading to adverse health outcomes. Recent studies[vii,viii,ix,x] demonstrate that the results of the RAND study are still applicable and that higher coinsurance is most effective at mitigating overutilization without leading to adverse health outcomes for elective health care services with elastic prices. In a recent discussion with Dr. Newhouse, he felt that there was some potential for a system of value-based insurance in which copays and deductibles were dropped for medically necessary care and raised for elective care.

Other consumer-driven efforts to reform health care include the introduction of high deductible health plans coupled with health savings accounts as a means to make consumers more accountable for their health care choices. These efforts are often accompanied by promotion of more transparent measures of health care regarding cost, quality, and safety. Consumer-driven efforts to reform health care are premised on rational choice theory, which suggests that if consumers have the knowledge and the motivation they will make more prudent health care decisions. Primary health promotion such as increasing exercise, decreasing weight, and appropriate diet has also been encouraged as a means to promote health and decrease inappropriate health care utilization. And, chronic disease self-management programs such as the ones taught at the Stanford Patient Education Research Center have been shown to decrease health care utilization.

The consumer-driven movement has largely centered on making the patient a more proactive and knowledgeable participant in the decision making process regarding their health. This is premised on a patient-centered model of health care delivery that positions the patient as the locus of health care decision making.

Supply-Side Levers of Health Care

Health care from the supply side is primarily a production function, that is, goods and services are produced and sold.[xi] Health care providers and companies that supply medical care equipment, and especially medical technology, are two supply-side groups with a great deal of leverage in impacting the utilization of health care resources. Providers supply services and expertise to patients. They diagnose ailments, provide treatment, prescribe medications, and coordinate activities between themselves and other providers. To varying degrees, patients depend on providers to make decisions about their health in areas where they lack expertise. Businesses create and manufacture products that sometimes improve the quality of patients' lives and also contribute to a lucrative business cycle of rapid diffusion without proving effectiveness. Although

not motivated entirely by economic incentives, health care suppliers are profit-maximizing entities. When considering supplier behavior and potential mechanisms for influencing it, it is necessary to distinguish between these two groups because each contributes differently to the health care system. Ultimately suppliers are a significant determinant of how health care resources are utilized.

Similar to the demand side, there are comparable supply-side assumptions that provide insight to ways in which supplier behavior can be influenced to effect how health care resources are utilized. First, it is assumed that in the absence of federal regulation, suppliers of medical equipment and technology will continue to behave as profit-maximizing entities. Second, it is assumed that health care providers will respond to financial incentives. Finally, it is assumed that the right types of financial incentives can be created—that is, that financial incentives can be created that will improve the efficiency of the health care system, the quality of goods and services delivered in the short-term, and the health outcomes of targeted populations in the long-term. These assumptions imply that a necessary condition of supply-side reform will require restructuring the incentive system in such a way that encourages cooperation between entities that sometimes compete, but that are also sometimes required to work cooperatively.[xii]

Mechanisms used to alter supply-side behavior include financial incentives such as pay-for-performance (P4P), both under fee-for-service and capitated payment systems. The intent of pay-for-performance is to incentivize desired provider behaviors while discouraging inappropriate use of health care resources, including overutilization (prevalent under fee-for-service) and underutilization (prevalent under capitation). Pay-for-performance, if structured properly, can improve the quality of care patients receive and the efficiency with which those services are delivered; however, at present most P4P programs have focused on health care process measures and not on health outcomes.[xiii]

In addition to restructuring payment systems, efforts to influence supply-side behavior have also included restructuring delivery systems. Medical homes and integrated medical groups are examples of restructured delivery systems built around the concept of managed care. These models of delivering care target primary and preventive care and management of chronic diseases. The appeal of integrated care models is that they can lower the costs of providing care through comprehensive, coordinated, and virtually integrated systems. Although these delivery systems can provide care that is less costly than traditional systems, like traditional delivery systems, they also struggle with designing a payment system that rewards providers on the basis of health outcomes. Other efforts have included providing professional education to providers regarding their utilization patterns accompanied by a follow-up and feedback loop.[xiv]

Supply-side efforts to improve the utilization of health care resources have primarily centered on altering the behavior of providers to create incentives around value-based decision making. Noticeably absent from this commentary is a discussion of regulatory mechanisms to induce suppliers, specifically suppliers of medical technology, to alter their behavior. The medical technology market has historically been privately regulated, creating few incentives to slow the diffusion of technologies or prove the efficacy of products. Attempts from both the federal government and private insurers to require companies to prove effectiveness have been successfully resisted by medical technology special interests. Growing push-back is beginning to

evolve in the US that centers on validating the value of medical care products through studies of cost-effectiveness and comparative effectiveness.

A close look at the demand- and supply-side factors influencing the utilization of health care resources suggests that there are activities we can engage in throughout the various levels of the health care system that would move us closer to a system whose primary goal is to improve population health. The following table provides a summary of the supply- and demand-side factors influencing the utilization of health care resources:

Factors Influencing the Utilization of Health Care Resources	
Supply-Side Levers	**Demand-Side Levers**
Pay-for-Performance	Coinsurance
Capitation	Premiums
Managed Care	Deductibles
Medical Homes	Tiered Coinsurance by Area of Care
Regulation of Supply and Pricing	Health Savings Accounts
Certificate of Need	High Deductible Health Plans
Cost and Comparative –Analysis of the Effectiveness of Technology	Wellness Programs
	Employer-Based Wellness Incentives
	Patient Education
	Disease Self-Management
	Chronic Disease Management

The examples of the Dutch health care system and QuadGraphics show how supply- and demand-side levers can drive improvements in health outcomes. The CT scan usage example highlights the inadequacies of the present health care delivery system and provides direction on how various health care markets might contribute to improving the functioning of the system.

The Dutch Health Care System

In 2006 the National Health Insurance Act was enacted in the Netherlands.[xv] This Act transitioned Dutch health care from a system defined by supply-side regulation to a system with universal coverage that has multiple payers, is partially private, and achieves efficiency through managed competition. The Act was not the product of sweeping, overnight change but rather 60 years of ongoing, consistent policy initiatives to improve the functioning of the Dutch health care system.

Improvements to the Dutch system occurred in three discernible waves. From 1940 through 1970 Dutch health policy focused on attaining universal health insurance coverage. The culmination of the universal coverage movement produced an individual mandate requiring citizens to purchase private insurance using income-based subsidies. With universal health coverage exceeding 97 percent, policy focus shifted from national coverage to cost-containment. From 1970 through 2000 the Dutch government instituted a series of supply and price regulations intended to control growth and spending. The policies accomplished two goals: 1) a shift from a fee-for-service system to a lump-sum payment per hospital for all specialists working in that hospital; and 2) the creation of a budgeting system that allows the government to control physicians' fees and total

revenues. With growing costs under control, in 2000 the government again shifted policy focus toward achieving efficiency through managed competition. The managed competition scheme creates a legally prescribed set of benefits that all insurers must supply, with risk equalization payments being paid to health insurers for individuals with predictably high medical bills. Health insurers compete for enrollees into legally prescribed basic benefits plans and compete for enrollees into supplemental policies. These waves of improvements helped define the key features of the current system and suggest a direction for the health care system in the US.

From the supply side of health care, the Dutch system relies on managed competition of private health insurance markets to improve the quality of health care products offered to consumers as well as government regulation of pricing for medical goods and services to control the cost of their health care system. Moreover, demand-side levers—for example, an individual mandate and the provision of government subsidies to families to select their own primary and supplemental health insurance packages—promote individual responsibility while allowing choice over the type and quality of health care products and services desired.

QuadGraphics

Whereas the US health care system is known for its high-cost, limited quality, and gross inefficiencies, QuadGraphics, is an anomaly operating on the outskirts of the largely inadequate health care system. QuadGraphics is the world's largest privately held printer of magazines and catalogs, with annual sales that total more than $1 billion. Even more impressive than the company's professional resume is how it delivers health care to its more than 12,000 employees. QuadGraphics offers on-site primary care clinics staffed by salaried doctors and a limited number of specialists that are awarded financial bonuses on the basis of health outcomes and patient satisfaction. They independently negotiate and contract with a limited number of hospitals and additional providers and use data to drive daily decision making on the health needs of their employees.

Confronted by challenges in trying to slow the growth of inflation in its health care costs, QuadGraphics has managed to eliminate a substantial source of costs by staffing salaried physicians that are paid at a competitive rate and negotiating directly with hospitals and providers for services. In addition to striving toward economic efficiency, the company's care model is premised on continually improving population health and wellness. Thorough and ongoing primary care treatment coupled with in-house health management programs has resulted in a healthier workforce when compared to the national average. Its patients use hospital services nearly 30 percent less than average, and its outpatient surgery rate is 45 percent of the national average. Although the company spends more in dollars on primary and outpatient care than the national average, its overall cost per employee is $2,500 to $3,000 less than the average costs per employee in its geographic region.[xvi]

QuadGraphics uses supply-side levers to promote efficient utilization of health care resources and to alter the incentives driving provider behavior. Managed primary care featuring on-site medical clinics and drug pharmacies coupled with low, in-house regulation of pricing for primary care visits and prescriptions are used to emphasize population health. Ongoing preventive care and easily accessible and reliable medical care control costs by lowering the demand for chronic care and management. In addition, capitated physician salaries and a pay-for-performance scheme based on health outcomes and patient satisfaction discourages inappropriate use of resources by

physicians by removing the overuse incentive created under the traditional fee-for-service payment system.

Demand-side utilization shifters such as employer-sponsored financial incentives support workforce health and wellness. Other demand-side levers such as low coinsurance for utilization of in-network clinics and no coinsurance for prescription compliance in its chronically ill population discourage consumer-driven moral hazard by encouraging appropriate consumer utilization of health care resources. QuadGraphics uses demand-side levers to challenge traditional criticisms of the third-party payer system that makes health care consumers price insensitive by shielding them from the true cost of medical care products and services. This suggests that lower coinsurance rates can discourage inappropriate overuse of medical services by consumers when the right types of incentives are created.

CT Angiogram Scans

The *New York Times* article on weighing the costs of indiscriminate utilization of CT angiogram scans to look inside the heart highlights the failures of the US health care system and the tensions within and across different health care markets.[xvii]

CT angiogram scan utilization demonstrates that the current payment system does not reward physicians on the basis of health outcomes or compliance with well-known standards of care. If the payment system were revamped to *adequately* compensate physicians and reward desired behaviors, physicians might be encouraged to alter their methods for generating sufficient income.

The research and development field also presents opportunities to improve the health care system. Perfect (or even adequate) information and transparency are severely lacking with regard to CT angiogram scans. Presently, there seems to be no established protocols for determining when to administer scans. The most valuable source of research and development might rest in developing a mechanism to determine or assess risk factors for the following: 1) the probability that a blocked artery will rupture; and 2) quantifying the cancer risk from exposure to high doses of radiation. This is information that CT angiogram scans cannot tell patients, but that would certainly drive the ordering patterns of cardiologists.

The rate at which CT angiogram scans are diffused and utilized without meeting any minimum standards of proven effectiveness highlights the failures of the federal government in regulating the US health care industry. Although the federal government is a huge purchaser and payer of health care services historically, it has taken a hands-off approach to regulating the diffusion and quality of medical technologies and equipment. As a result, the diffusion and utilization of CT angiogram scans have flourished and efforts to require a minimum standard of proof regarding effectiveness have been trampled by scan lobbyists.

Despite the inadequacies of the system, there are industry-wide (but market specific) actions that can be taken to begin to reform the present system to one that is more accountable to patients, fair, and evidence-based.

- For physicians working in hospitals or medical groups, incentivize desired behaviors (i.e., discriminate utilization) and desired health outcomes at a level commensurate with their standard of living and efforts

- Create evidence-based protocols and guidelines for determining which patients are eligible for CT angiogram scans
- Launch an push-back marketing campaign intended to alert and, in some cases, educate patients on the risk associated with CT angiogram scans
- Run cost-effectiveness or comparative effectiveness trials intended to determine which medical technologies are complements to or substitutes for CT angiogram scans, in which circumstances they can be used as such, and on which patients they can be used
- Begin internally scrutinizing decisions to adopt new medical technologies via an internal expert panel comprising health care providers who are current staff members within a medical group or hospital
- For health care purchasers, create explicit and transparent criteria defining the conditions (based on a medical claim) for CT angiogram scan utilization and a tiered pay schedule that coincides with it
- Begin to build coalitions to advocate for some form of federal regulation regarding adoption and diffusion of new technologies

VI. Conclusion

Health care economics provides useful insight on the nature and complexity of the problems plaguing the US health care system. Misaligned incentives, ill-informed consumers, limited regulation, and limited evidence on the proven effectiveness of medical technologies and treatments are the root causes of a poorly performing system that fails to produce as much health as it might, given the resources it uses. By elucidating the problems that plague the US health care system, it is also evident that there are activities that both the supply and demand sides of health care can engage in to mend the broken system. A growing awareness from all sectors of the health care industry is beginning to take shape—patient awareness programs, restructured payment and delivery systems, and the budding field of comparative effectiveness. Abroad, the Dutch model demonstrates that an emphasis on the health and well-being of the population does not compromise the vitality of private markets operating within the health care industry when those markets are engaged in meaningful discourse with the federal government on the direction and intent of policy. In the US, the work of QuadGraphics demonstrates that through exceptional primary and preventive care it is possible to not only improve the health of a population, but to also lower the per capita cost of delivering that care.

Small-scale, local-level progress has been made in redesigning the US health care payment system, restructuring health care delivery systems, and transforming the role of the consumer. But, the work of overhauling the health care system is far from complete. Looking ahead, evolving patient education programs, gathering evidence-based protocols, and building cooperative relationships between the various health care interests will complement the work that has already begun.

<u>Patient Education</u>
Future patient education efforts should center on building comprehensive health literacy. The health care system is continually evolving and becoming more complex. In addition to knowing how to manage their personal health, patients must also be capable of navigating the health care system—knowing how and where to access information, being able to interpret information, and knowing how to compare health care alternatives will enhance the care experience, creating health

partnerships between patients and providers that redefine the characteristics afforded to the traditional principal-agent relationship.

Evidence

Providers need assistance, despite their advanced level of technical skill and competence. A great deal of information exists on health care products, but too little of that information provides researched-based analysis of the comparable effectiveness and per dollar/per unit of health value for medical care alternatives. Along similar lines, while consumers are capable of making well-reasoned health care decisions, they do not possess the same level of technical skill as health care providers; they also need help. Consumer-friendly resources, available in both web-based and print-based formats, prove invaluable in moving consumers toward being stewards of their own health care.

Relationships

Presently, the relationship between various health care interests in the US—insurers, consumers, and providers—is overwhelmingly adversarial. If present health care reform efforts are to endure and lasting improvement is the goal, insurers (public and private), providers, and consumers will need to work together cooperatively and realize that some level of compromise is necessary. The intent of compromise is for all interested parties to end up better off, with no party ending up worse off. That is, it is possible to improve population health through efficient resource utilization and primary health promotion under a payment system that rewards providers for improvements in health outcomes and patient experience without compromising the competitive viability of the health care industry.

VIII. Appendices: Payment Ideas

The current fee-for-service payment system is structured to encourage episodic care as opposed to prevention and wellness, and it fails to compensate providers for their expanded role in coordinating care and delivering services in non-traditional settings. Included below are practical payment system reforms intended to further support implementation of robust health care delivery systems. These payment reforms are not intended to completely uproot the existing system, but rather to complement the existing system in such a way that improves the value, quality, and functionality of health care delivery.

Primary Care

The primary care payment reforms described below are designed to incentivize desired provider and consumer behaviors and to adequately compensate providers for expanding the scope of their services to offer more comprehensive, coordinated medical care to patients.

- Fee-for-Service: Office visits + pay-for-performance for clinical processes, health outcomes, and patient satisfaction + fixed monthly (or quarterly) fee per unit of volume for bundled or separated telephone and email consultations. The services to be covered are to be determined up front with minimum and maximum volume limits also established. The predetermined list of payment codes can be included on the fee schedule and processed with medical claims forms.[i]

Explanation: A fixed fee per unit of volume with minimum and maximum volume limits is intended to contain the threat of gaming the system by overcoding for email and phone consultations. The idea is to pay providers for non-office visits at a rate that increases according to volume, but increases by less and less as volume of services increases, to the point of diminishing returns. The predetermined list of services might include reimbursement for non-emergency services that usually require a trip to the doctor's office such as email instructions for follow-up maintenance treatment, extended personal counseling, reporting lab and diagnostic testing results that require follow-up treatment, etc.

- Health Plans: Differentiate the pricing of health plan products for primary care services on the basis of health risk assessment scores, with price levels corresponding with a range of scores.[ii] Consumers are given the opportunity to save money on health plans by either meeting an absolute health risk assessment (HRA) score or by a predetermined percentage point improvement in their individual HRA score over a specified period of time. Comparable health plan products that emphasize disease management and health improvement can be created for the chronically ill.

  Explanation: This payment reform would be best supported in an environment where the insured and the insurer have had an ongoing, extended relationship. The idea is to reward those who are not chronically ill for being healthy and maintaining their healthiness through savings on the overall cost of their health plan. The savings could be a percentage (e.g., 5 percent off the coming year's cost) or a dollar amount discount for each full year spent in a higher (healthier) HRA group. It would be necessary to create a separate health plan incentive for the chronically ill because otherwise they would systematically (and unfairly) fall into the health plan corresponding with the lower HRA score range, thereby having less of an incentive and opportunity to improve their health or practice healthy behaviors.

- Copays and Deductibles: Lower patient copays and deductibles to encourage prevention and health maintenance for preventive care and annual check-ups, including screening and diagnostic testing. To promote health and wellness, employers or health plans can offer cash rewards or bonuses for health improvements, including discounted weight management packages (e.g., gym membership, resources, online behavioral counseling) and lump-sum cash payments (e.g., up to $300).

  Explanation: The idea is to make medically necessary preventive care easily accessible by removing the financial barriers that prohibit some from seeking preventive care and early treatment for conditions or illnesses that become more difficult and more costly to treat over time. The health and wellness incentives are intended to reward patients for making better health care decisions; a healthier population is the ultimate goal.[iii]

[i]The idea of layering fee-for-service with additional payment codes for non-office visits was generated from discussions with Care Oregon as well as Bellin Health. Setting volume limits was included as a precautionary mechanism to deter inappropriate or excessive coding.

[ii] Bellin Health is piloting differential pricing for health plans based on a specific HRA score.

[iii] A number of employers, including QuadGraphics, have successfully promoted and implemented several company-wide financial incentives to promote wellness amongst its employees.

Chronic Care

Successful chronic disease prevention and management is an area of medical care that insurers and providers struggle to contain. The chronically ill have poor health outcomes and over time generate substantial acute care costs without substantial improvements in their overall quality of life. More successful chronic disease prevention and management can be supported by the payment system reforms described below. These reforms can be layered on top of primary care reforms or conducted independently. Some of them also require an initial up-front investment in human resources and IT.

- Fee-for-service office visits (or capitated rate) + a risk–adjusted, per-member-per-month care coordination fee ($3-$5) + P4P (process, health outcomes, and patient experience) + partial or full lump-sum payment to support hiring a full-time case manager + retrospective quarterly lump-sum payment for disease-related workshops (patient education)

–OR–

- Fee-for-service office visits (or capitated rate) + a risk-adjusted, per-member-per-month care coordination fee ($3-5) + P4P + lump-sum payment to help subsidize the cost of electronic health records and the cost of hiring a data entry clerk + retrospective quarterly lump-sum payment for disease-related workshops (patient education) [iv]

  Explanation: Chronic care can be delivered in a primary care setting, but this sub-population of patients requires more intensive management and supports. These payment reforms are designed to meet the care needs and demands of this portion of a provider's patients. The per-member-per-month fee reimburses providers for coordinating care and for investing in resources that streamline the process. There is no evidence that one model is better than the other; each alternative represents schemes that are equally feasible and whose uptake are dependent on the individual capacity of the provider organization.

- Copays/Deductibles: Eliminate copays for medication for which there is evidence of proven effectiveness. Lower the costs of products used to manage the disease (e.g., home testing equipment, syringes, etc.).[v]

  Explanation: The idea is to improve access to effective drugs for the chronically ill by increasing their affordability. The cost of prescription drugs and equipment is often a deterrent for compliance. Greater access via increased affordability increases the probability of greater compliance.

- Lifestyle: Employers or health insurance companies can offer up-front partial subsidization for the cost of a gym membership, with the remaining balance conditional on successful accomplishment of a set of company-wide predetermined health goals at the end of a year. Company-wide vouchers and/or gift cards can be given to encourage healthy eating.

  Explanation: The idea is to promote a sense of shared responsibility between employers and/or insurance companies and employees in maintaining and improving health.

Employees are given an incentive to pursue a healthier lifestyle, and they also have to proactively work to achieve it.

[iv] These two alternatives are the product of Chronic Disease Management under the Advanced Medical Home Model.

[v] This suggestion was informed by a conversation with Matt Stiefel and by a reconceptualization of the effect of cost-sharing on utilization of outpatient medical care as presented by the classic RAND study.

Other Types of Medical Care

In addition to being supported by primary and chronic care payment system reforms, health care delivery system transformation is also supported by payment system reforms that can occur in a variety of settings, including state legislatures, hospitals, and community health clinics.

- State Interventions: Similar to the private sector, update fee schedules to include compensation for non-office medical care, including specific types of email and telephone consultations.[vi] Partially subsidize or offer low or no interest loans to providers to invest in electronic health records, to hire case managers, and to hire nurse practitioners. Layer fee-for-services with P4P for providers who treat the publicly insured. Offer providers financial incentives to care for Medicare and Medicaid populations in a medical home setting, including partial per-member-per-month case management fees.

  Explanation: This reform is intended to remove the stigma attached to public insurers and their reimbursement mechanisms. The idea is to create a public delivery and payment system that is comparable to or better in quality and structure than what is offered by the private market, to eliminate the negative distinctions associated with the public product.

- Providers/Insurers: Work cooperatively to create a value-based provider payment system that layers on top of the hospital and physician group payment system and P4P initiatives (process, health outcomes, and patient experience). Create an extended medical staff between hospitals and physicians in which resources—physical and material—and revenues are shared. Implement a global budget that offers the incentive of shared savings between the extended medical staff and insurers based on adherence and proximity to the budget.[vii] Hospitals that exceed the global budget lose up to10 percent of money withheld up front for value-based performance. Hospitals and physicians that are below the global budget share the savings with insurers in addition to up to double the money initially withheld for value-based performance.

  Explanation: This payment reform is intended to promote the idea of a community of medical care providers who work cooperatively to improve patient health and outcomes. The payment and financing mechanism purposefully supports this type of integration, eliminating "structural" and institutional impediments to providing superior care. The idea of withholding a percentage of total revenues up front and using it as a quality incentive is taken from the Centers for Medicare and Medicaid Services value-based payment delivery and payment reforms currently being piloted in hospitals. Providers are paid approximately 85 percent of their total revenues with the opportunity to earn back the additional 15 percent through quality improvement (process, health outcomes, and patient experience). The payment reform outlined above creates a situation in which it is possible to earn 100

percent of total revenues from the value-based incentive plus an additional portion of savings generated by adherence to a global budget. The global budget that is created should be based on a historical analysis of expenditures data so that the target set is grounded within a reasonable framework.

- Hospitals, Safety Net Providers, and Insurers: Create networks of providers that work cooperatively to institute a 24-hour medical call center accessible to the insured and uninsured via a toll-free phone number. All calls begin in a central location and are directed to the appropriate entity by a representative. Nurses and nurse practitioners can staff the call center on a rotating basis from the community of providers. The call center can provide medical consultation, customer service, and health resources. The goal of the medical call center is to provide a reasonable alternative to patients (both the insured and uninsured) for non-emergency medical care and to potentially eliminate unnecessary medical office and emergency department visits.[viii]

  Explanation: This set-up does not require new physical space, but rather a virtual integration of networks already in place to. It represents a communal approach to tending the health care needs of the population served while offering the potential of holding down institutional costs associated with non-emergency use of the emergency room and unnecessary visits to the doctor's office.

[vi] The Health Care Reform Commission in Vermont has been extremely active in using state-level payment reforms to realize the goals of the Triple Aim.

[vii] The extended medical staff model is based on the work of Elliot Fisher and his conception of an Accountable Care Organization. The Health Care Commission in Vermont is in the process of developing the characteristics and measures that define an Accountable Care Organization. The risk component of the suggestion is based on the assumption of shared risk between the insurer and provider.

[viii] This suggestion is the combined product of components of the Advance Access model pioneered by IHI and the research on medical call centers supported by a nurse triage.

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