



## Note on Physician Compensation and Financial Incentives

*The question is where to draw the line. At what point does a financial incentive create a conflict of interest, in which physicians' behavior may be motivated substantially by pecuniary self-interest rather than by the patient's best interest?<sup>1</sup>*

*There are three compensation models. Last year's, which everybody hated. This year's, which nobody likes. And next year's, which is the perfect answer.*

—(George W. Shannon, internist and family practitioner with the Horizon Physician Network)<sup>2</sup>

During the past two decades health care costs have exploded to an extent where they now represent more than 13% of U.S. GDP. Factors accounting for the rapid increase in health care expenditures include technological advancements, pharmaceutical breakthroughs, an aging population, financial incentives that have rewarded "doing more" and a cultural bias toward intervention. All these forces act in the same direction. Their cumulative effect has meant that those individuals and organizations that deliver health care have access to more advanced and costlier procedures and equipment to use on a larger pool of people, and, in the traditional fee-for-service environment, a financial incentive for doing so. This trend of increasing levels of intervention has been consistent with a core value of the American medical system, that more is "better."

Physicians have been recognized as playing a key role as drivers of health care costs. Physician practice management companies, such as Phycor, have noted that "while physicians only receive around 20 percent of healthcare expenditures, their decisions determine approximately 80 percent of healthcare expenditures as they manage the diagnosis, treatment and care of their patients."<sup>3</sup> Accordingly, physician's clinical behavior has come under increasing scrutiny as employers and managed care organizations grapple with increasing costs. Much of current health care reform is focused on identifying ways to change physician behavior, to encourage more careful use of resources, and to ensure that care is delivered in the most efficient manner and appropriate setting.

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<sup>1</sup> Hillman AL. "Financial incentives for physicians in HMOs." *N Engl J Med* 1987;31:1743-48.

<sup>2</sup> Walpert Bryan. "Pointers on how to divide income among physicians." *ACP-ACIM Observer* 1998;18:8-9.

<sup>3</sup> Phycor web page, [www.phycor.com](http://www.phycor.com). Phycor is a physician practice management company.

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*Melanie Harshbarger (MBA '99) prepared this note under the supervision of Lecturer Richard Bohmer, M.D., MPH, as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.*

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This is not a new problem. Control of health care costs has been a health policy objective since at least the late 1960s. A number of interventions have been tried, each based on an underlying hypothesis about what drives health care costs.

- In the late 1960s the perceived solution was to add doctors. Based on simple supply and demand theory, the belief was that increasing the supply of doctors would drive down the price. There was a surge in medical school funding and policies that supported physician training. As a result the per capita supply of specialist physicians rose almost 50% between 1970 and 1980.<sup>4</sup>
- In the face of continued cost increases, in 1983 a prospective payment system was introduced for Medicare (the largest public health insurance program). This reimbursement system, called the Diagnosis Related Group (DRG) system, paid a hospital a fixed amount per discharge on the basis of diagnosis only, regardless of the hospital resources utilized.
- The late 1980s mark the beginning of managed competition. Excess hospital bed capacity was an attractive target for cost reductions. The power of both large purchasing cooperatives and physician groups rose significantly. The former worked to reduce the price to insurers. The latter worked to reduce the actual cost of providing health care services; however those cost improvements are not necessarily passed on to insurers and consumers as there is evidence that the stronger the physician groups, the higher the costs. Capitation reimbursement and risk sharing also emerged during this decade.
- Since the 1980s and continuing through today there has also been a significant increase in management interventions in processes for providing care and monitoring of clinical decisions, through mechanisms such as utilization management and peer review. However, these interventions can be both costly and divisive. Rather than relying solely on process interventions in physicians' decision making, payers have looked to aligning incentives with physicians as a way of encouraging cost-conscious clinical practice.
- Excess capacity, not just in hospital beds, but in specialty physicians has also been a target for cost reductions. The success of targeting those areas is most apparent in the lower fee scales paid by HMOs over the 1993-1996 period. However, underwriting of insurance goes in cycles, and decreasing costs are not expected to last. Although intensifying competition between physicians for both payers and patients is anticipated to restrain costs, health care costs are forecast to increase over the next decade.

It was realized that simple supply and demand doesn't work in this setting. Physicians can "induce" demand, which works against the theory that adding more physicians will drive down health care costs. Having more physicians results in more tests, procedures or visits, thereby actually adding costs.<sup>5</sup> The range of recent interventions attest to the growing realization of the role of physicians in the past decade's exploding health care costs. Lately financial incentives have received considerable attention as a way to encourage physicians to take responsibility for their behavior. The belief that financial incentives may hold the key to reining in costs originates from the body of knowledge that exists regarding the use of financial incentives in other industries.

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<sup>4</sup> Grumbach K, Coffman C. "Physicians and nonphysician clinicians: complements or competitors?" *JAMA* 1998;280:825-6.

<sup>5</sup> Meredith Rosenthal, Ph.D., Harvard School of Public Health. Personal communication, 1999.

## What Are Financial Incentives?

Financial incentives are tools used to encourage or discourage behaviors or outcomes based on the rationale that people seek to maximize individual profit and will respond to financial rewards or penalties. Financial incentives are used in virtually all industries and exist in a variety of forms, ranging from yearly bonuses, penalties, stock options, and pay for performance. While most would agree that financial incentives influence behavior, there is ongoing debate about their sustainability and effectiveness.

Opinions differ as to whether financial incentives truly “motivate” behavior and what happens to behavior when the financial incentives go away. Some argue that financial incentives are a short-term fix that neither produce sustainable behavior nor create employee satisfaction and loyalty. Others cite their widespread use and conclude that, not only do they work, organizations cannot get by without using them in today’s competitive labor market.

There is also debate over whether incentives should be based on individual or group performance. Concerns regarding incentives based on individual performance are that they discourage teamwork and encourage maximizing short-term results. A major concern of group rewards is the “free-rider” issue whereby individuals do not work as hard because they know they will automatically share in the rewards of the rest of the group who is working hard. However, there are forces that mitigate the free-rider problem. “Individuals do not make decisions about how much effort to expend in a social vacuum; they are influenced by peer pressure and the social relations they have with their workmates. This social influence is potent.”<sup>6</sup>

In discussing the effectiveness of incentive plans, George Baker writes, “Incentives are very powerful at motivating the behavior they reward. The problem is not that incentives do not work, but that they work too well. They are like a super-charged engine on a car: they can move you very fast and very far, but they can also throw you off the road before you even know what happened.” His solution is not to abandon incentive plans, but rather he advises, “Managers must learn how to harness and use the power of incentives to drive individual motivation and organizational effectiveness.”<sup>7</sup> Compensation and incentives send a powerful signal about the culture of an organization and what it values.

## Incentives in Health Care

While it is helpful to have a base understanding of how financial incentives work in general, there are several unique aspects of health care that make their application complex in this setting. Most important are the numerous other powerful incentives operating to influence and shape physician behavior. Some are characteristic of the medical professional culture while others are the result of deliberate management interventions.

First and foremost, the medical profession is built upon a strong code of professional ethics. At the center of medical professionalism is the belief that the patient’s needs come before the physician’s. In swearing his professional oath, Hippocrates stated:

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<sup>6</sup> Pfeffer J. “Six dangerous myths about pay.” *Harvard Business Review* 1998;76:109-19.

<sup>7</sup> Baker G. “Rethinking rewards.” *Harvard Business Review* 1993;71:37-49.

I will prescribe regimen for the good of my patients according to my ability and never do harm to anyone. . . . In every house where I come I will enter only for the good of my patients, keeping myself far from all intentional ill-doing and all seduction. . . .

In the modern era the physician's ethical obligation and personal desire to do whatever possible to improve patients' lives and put their needs above all else has tended to exclude any consideration of cost. The medical profession has a long and solid tradition of altruism, and the strength of the trust upon which the doctor-patient relationship is based cannot be underestimated. In addition to professional and personal ethics, the risk of being charged with medical malpractice may influence physician behavior.

In addition to ethical incentives, many nonfinancial mechanisms currently influence physician behavior. These include feedback and profiling, peer review, second opinion and utilization management strategies, medico-legal sanctions, and continuing medical education.<sup>8</sup>

It is important to recognize that there are other incentives and forces at play that influence physician behavior. These can either conflict with or mutually reinforce one another. The major concerns about risk-bearing financial incentives<sup>9</sup> are that they may result in physicians delivering less care, seeing patients less frequently, and admitting patients less often. The challenge is to understand how financial incentives compete and interact with the wide range of cultural and nonfinancial forces that compel physicians to act in the best interests of their patients. While financial incentives often dominate the discussion, in practice there are many forces that influence a physician's ultimate behavior and decision making.

## Financial Incentives in Health Care

Recognizing that competing incentives exist in health care, the remainder of this note will focus specifically on financial incentives. In today's health care environment both patients and physicians are subject to financial incentives. The former are influenced by the incentives put in place by their insurers, such as co-payments, deductibles and point-of-service options. The latter are influenced through reimbursement and compensation arrangements.

### Patients

Studies have confirmed that patients respond to financial incentives. In the late 1970s/early 1980s, Joe Newhouse and others conducted the RAND Health Insurance Experiment. In this study, 2,000 non-elderly families were assigned to one of 14 fee-for-service plans or to one prepaid group plan. The goal was to examine how cost sharing affected health care resource use and health status.<sup>10</sup> The study found that:

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<sup>8</sup> For a thorough review of these nonfinancial mechanisms, see Bohmer R., "Influencing Physician Behavior," HBS Case No. 699-124.

<sup>9</sup> The most commonly referred-to risk-bearing financial incentive is capitation. Capitation is a reimbursement method under which physicians are paid a per-member, per-month rate for each enrolled member assigned to them regardless of what services are provided. Capitation will be discussed in greater detail in the later sections of this note.

<sup>10</sup> Joseph P. Newhouse and The Insurance Experiment Group, *Free For All? Lessons from the RAND Health Insurance Experiment* (Cambridge: Harvard University Press, 1993). *Free For All*, pp. 338-9.

- “The more families had to pay out of pocket, the fewer medical services they used.”
- “All types of service—physician visits, hospital admissions, prescriptions, dental visits, and mental health service use—fell with cost sharing.”
- “The reduced service use under the cost-sharing plans had little or no net adverse effect on health for the average person. . . . Indeed, restricted activity days fell with more cost sharing. Health among the sick poor—approximately the most disadvantaged 6 percent of the population—was adversely affected, however.”

Other researchers report comparable findings. For example, Hillman notes that “it is human nature to respond to financial incentives. Patients who must pay for part of their medical care, for example, are nearly one-third less likely to seek treatment for minor symptoms than patients who are not subject to out-of-pocket costs.”<sup>11</sup>

That patients respond to financial incentives and may, as a result, suffer an adverse clinical outcome is demonstrated by a study of the relationship between insurance status and the risk of ruptured appendix. Uninsured, Medicaid, and private fee-for-service patients were more likely to suffer a ruptured appendix than were patients who were covered by private capitated health insurance.<sup>12</sup> The authors argue that each of the three populations may delay seeking care, due to financial barriers, during those crucial few hours it takes for appendicitis to advance to appendiceal rupture. Even those with private fee-for-service insurance face a co-payment that may create a barrier to seeking necessary health care.<sup>13</sup>

## Physicians

While patients respond to how much money comes out of their pocket, financial incentives for physicians are structured to affect how much money goes into their pockets. Physicians have always been subject to financial incentives in the form of reimbursement mechanisms and compensation structure. In fact, concerns about misaligned incentives and ethical conflicts date back many years. Numerous studies since the early 1980s have examined the phenomenon of “inappropriateness.” “Inappropriate care” is that where the benefits are outweighed by the risks. Observations of high rates of care deemed either inappropriate or equivocal (combined rates as high as 25%) raised concerns that physicians were responding to the financial incentive inherent in fee-for-service reimbursement and oversupplying medical care.

Shortly thereafter a series of Medicare fraud issues also spotlighted the issue of the appropriateness of financial incentives and physician compensation. Legislation, referred to as the Stark laws, was enacted to regulate physician ownership of and referrals to ancillary services, such as radiology and laboratory services. Similarly, anti-kickback regulations aimed to ensure that physicians were not improperly referring patients in order to gain profits for themselves.

Today the debate centers on the incentives inherent in fee-for-service and capitation and the behaviors that are likely to result. However, it is important to recognize that there is no such thing as incentive-free reimbursement. All reimbursement mechanisms are designed to influence physician

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<sup>11</sup> Hillman AL. Financial incentives for physicians in HMOs, *N Engl J Med* 1987; 31:1743-48.

<sup>12</sup> Braveman P, Schaff VM, Egarter S, et al. “Insurance related differences in the risk of ruptured appendix.” *N Engl J Med* 1994;331:444-9.

<sup>13</sup> Ibid.

behavior toward some outcome.<sup>14</sup> Rapidly rising health care costs have forced us to examine traditional fee-for-service reimbursement because it is built upon an inherent incentive to do more. Managed care shifts the incentive from one that rewards volume of care delivered (under fee-for-service) to focus on the how care is delivered in terms of efficiency and quality (under capitation/risk sharing).<sup>15</sup> In summary, fee-for-service and capitation each have the potential to adversely affect patients—they just do so in opposite directions. Fee-for-service could result in too much care while capitation could result in too little care. It is not evident which one is worse.<sup>16</sup>

As the focus has shifted to cost containment and decreased utilization, so has the degree to which physicians are becoming more directly accountable for resource use and costs. What has emerged is a variety of forms of risk-sharing relationships between payers and physicians. Risk is an insurance concept in which patients (or their employers) pay for the insurance premium but not for the actual health care provided. A risk-sharing relationship is one in which the physician takes part of the financial risk that has traditionally been fully borne by the insurer. Thus, risk is defined as “the potential to lose money, earn less money, or spend more time without additional payment.”<sup>17</sup> In other words, physician compensation is now more directly exposed to a downside loss. “The essential difference between health maintenance organizations [HMOs] and more traditional settings for patient care is the distribution of financial risk among the purchaser of health care, the provider of care, and the insurer.”<sup>18</sup> The most common example of physicians taking on more risk is the rapid increase in capitation reimbursement.

There are many different types of financial incentives. This paper will (a) describe the different financial incentives, (b) describe their effects, and (c) define some key characteristics of successful financial incentives.

## Types of Reimbursement

Physicians in the United States are reimbursed in a number of ways. The incentives inherent in each reimbursement mechanism differ based on the type of behavior or outcome they either directly or indirectly encourage. The challenge is to properly define the outcome we are seeking and to make sure that the compensation structure rewards or encourages physicians to behave toward that outcome. Equally challenging for managers is to incorporate the broader set of values that are important to physicians, such as balance between work and family life and a sense of fairness, into the compensation structure.

To get a complete understanding of how financial incentives work, it is first important to understand how physician compensation and risk work in practice today. There are three major compensation methods: fee-for-service, salary, and capitation. **Figures A** and **B** depict these three compensation mechanisms and their associated risk and behavioral implications along a spectrum. On one end is a traditional indemnity model and on the other end is managed care.

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<sup>14</sup> Pearson SD, Sabin JE, Emanuel EJ. “Ethical guidelines for physician compensation based on capitation.” *N Engl J Med* 1997;339:689-693.

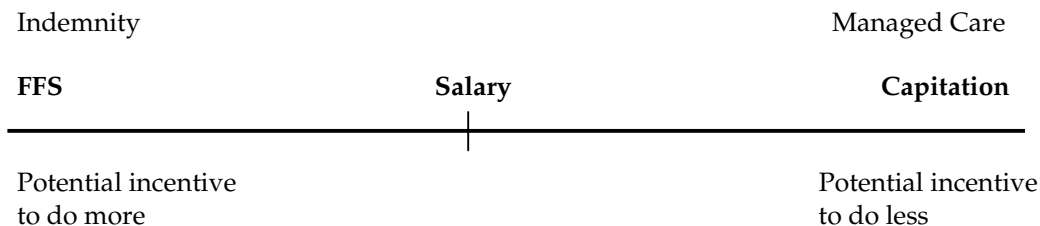
<sup>15</sup> Hillman AL. “Managing the physician: rules versus incentives.” *Health Aff (Millwood)* 1991;10:138-146.

<sup>16</sup> *Ibid.*

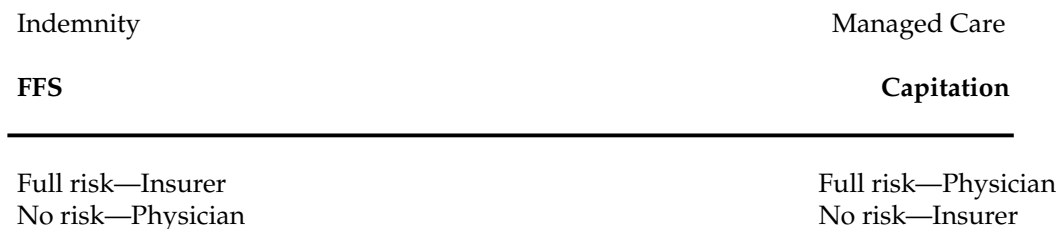
<sup>17</sup> Bodenheimer TS, Grumbach K. “Capitation or decapitation: keeping your head in changing times.” *JAMA* 1996;276:1025-31.

<sup>18</sup> Hillman AL. “Financial incentives for physicians in HMOs.” *N Engl J Med* 1987;31:1743-48.

**Figure A** Reimbursement and Influence on Behavior



**Figure B** Who Bears the Risk



**Fee-for-service**

Physicians receive a fee for each service they perform. For example, Dr. Jones sees her patient for a routine office visit, performs a test and then reviews the test results. Dr. Jones bills an insurer (or a patient) a separate fee for each of those services and receives a separate reimbursement for each of the three. To the extent that reimbursement influences behavior, fee-for-service rewards providing more care. Under this traditional indemnity model, insurers or self-insured employers assume all the risk for health care costs. Physicians are not at risk for the cost of the services they provide. Similarly, insured patients are not at risk for the total costs of the services they receive. This perpetuates the incentive to provide more care because someone else (i.e., the insurer) is paying the bill.

**Salary**

Physicians are employees of the HMO or group and receive a salary. This is considered neutral with respect to potential effects on behavior because Dr. Jones receives the same salary regardless of what services she does or does not provide to the patient. (Note that Dr. Jones’s employer may receive reimbursement on either a fee-for-service or capitated basis.) From the physician’s perspective, there is no reward for providing either more or less care. Salaried physicians feel risk only if they are part owner of the group in which they are employed and if that group has risk contracts. Salary is increasingly considered a failure because it does not address the issue of physicians being more responsive to either their colleagues or patients.<sup>19</sup>

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<sup>19</sup> Steven Pearson, M.D., Associate Director of Center for Ethics in Managed Care. Personal communication, 1999.

**Capitation**

Physicians are paid a per-member, per-month (PMPM) rate for each member who is assigned to them. Accordingly, the number of patients assigned to them determines their annual income. Similar to a salaried physician, Dr. Jones receives the same PMPM regardless of what services she provides. In contrast to the salaried physician, a capitated physician could experience a decrease (or increase) in income if she spends more (or less) than the capitated amount she receives. However, if a PCP is capitated only for primary care services then she is basically at risk only for her time and bears no financial risk. Conversely, there is significant potential financial risk if she is capitated for specialty, ancillary, or hospital services as well. To the extent that reimbursement influences behavior, capitation has the potential to reward providing less care. Under this managed care approach, insurers transfer the risk to physician groups and individual physicians.

Neither end of the spectrum accurately portrays the dominant reimbursement methods or risk models in practice today. In reality the picture is not so black and white. There are several mixed models that comprise the middle of the spectrum and more accurately reflect current practice. An increasingly prevalent approach is a salary plus incentive model. The incentive can be based on individual or group<sup>20</sup> performance. Performance can be measured on either productivity (utilization, referrals) or quality (clinical outcomes, patient satisfaction, access) dimensions. Although it is impossible to define all the variations being used, some common mechanisms in use include withholds, bonus pools, case rate, and carve-outs. **Figure C** indicates the existence of hybrid approaches to risk sharing.

**Figure C** Hybrids

FFS	Hybrids	Full Capitation
Full risk—Insurer/Purchaser No risk—Physician	Withholds —FFS —Risk pools Bonuses Case Rate Carve-outs	Full risk –Physician No risk - Insurer

**Withholds**

“At the beginning of each year, both physicians and the HMO agree on a goal for the amount of services or the cost of services their patients will use. However, the HMO keeps a portion of this payment. At the end of the year, if physicians overspend or exceed this budgeted goal, the HMO keeps the amount of money it withheld. If physicians underspend or use fewer services than budgeted, the HMO gives the withheld amount of money back to the physicians.”<sup>21</sup> These withheld funds are typically placed in risk pools for items such as specialty, ancillary, and hospital

<sup>20</sup> A group is an affiliation of physicians who share administrative services. The individual physicians may or may not be co-located.

<sup>21</sup>Health Care Financing Administration, Physician Incentive Plan (PIP) Regulation Guidance. Available from <http://www.hcfa.gov/medicare/physincp/pip-info.htm#overview>; Internet; accessed October 1998.

services. The risk pool may be organized by individual physician (tracking expenditures for her patients only) or for all physicians in the group.

### **Bonus Pool**

Bonuses refer to additional compensation that physicians receive on top of their base compensation. Bonus payments generally are made from the withheld funds mentioned above. Bonuses can be awarded based on individual physician or group performance.

### **Case Rate**

The case rate method reimburses physicians a flat rate for each episode of care. Physicians are at risk for each episode of care but not for the total health of the patient since each episode generates additional reimbursement. An “episode of care” is the care given to a patient with a specific condition over a defined period of time. For example, an episode of care for a patient with heart disease requiring an angioplasty might span one year. The flat case rate covers all care needed to treat the patient’s heart disease over this one-year time period, including the physician fees for the angioplasty and all follow-up visits.

### **Carve-outs<sup>22</sup>**

Carve-outs are services or high-cost diseases that are not required to be covered under the PMPM capitated rate that a physician receives. Physicians receive additional reimbursement, usually through fee-for-service, when they perform carve-outs. Examples of carved-out services include preventive-care measures such as mammograms. Physicians would receive additional reimbursement for each mammogram provided. Examples of carved-out diseases are AIDS and other chronic disease patient populations.<sup>23</sup>

Basically all of these hybrids are ways of managing the financial risk placed on individual physicians.

## **Framework for Evaluating Incentives in Practice**

All financial incentives share at least two fundamental characteristics: proximity and intensity. These characteristics provide a framework for classifying the incentives and predicting the impact a financial incentive structure will have on physician behavior. A third factor that then must be taken into account is the interaction of the incentives among the various players included within the same contract structure.

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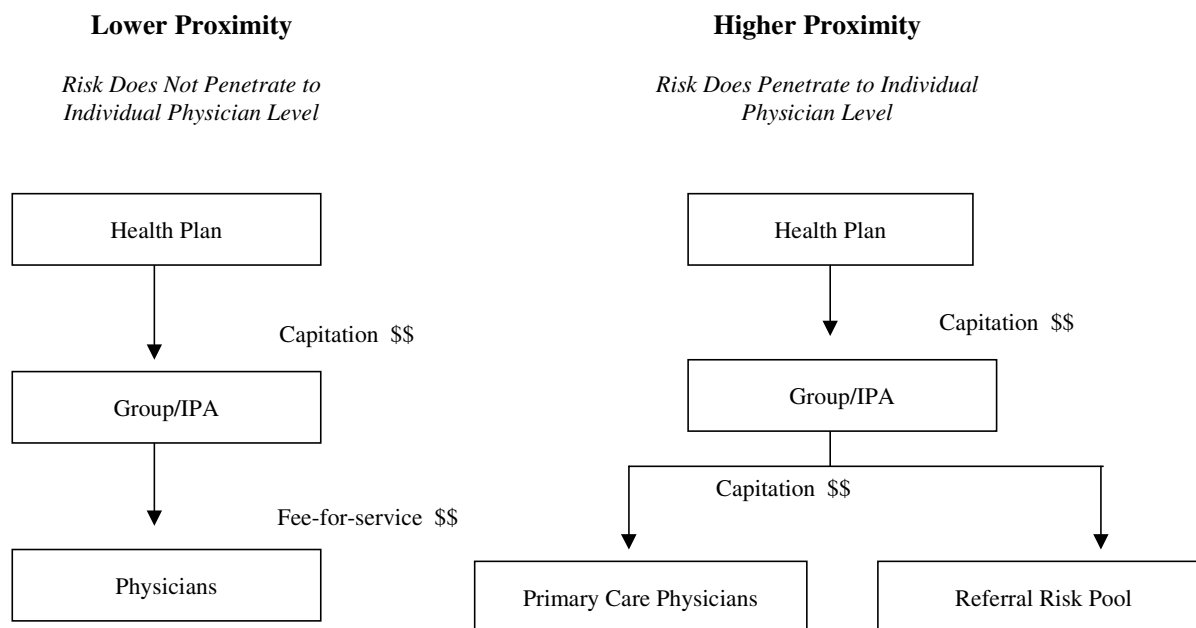
<sup>22</sup> Note that this is not the same as a carve-out at the plan or employer level where a specific disease category is provided and funded separately. For example, many employers will carve-out mental health services from their overall health plan and contract with a separate organization to provide mental health services.

<sup>23</sup> Bodenhemier TS, Grumbach K. “Capitation or decapitation: keeping your head in changing times.” *JAMA* 1996;276:1025-31.

## Proximity

Proximity describes how close the incentive is to the individual physician's interaction with the patient. High proximity means the incentive is close to the individual physician. The closer the incentive, the more impact it will have on individual physician-patient interactions. Low proximity means the incentive is further away from the individual physician. The more diluted the incentive, the less impact it will have on individual physician-patient interactions. An example of dilution occurs when the incentive is spread out over a large pool of patients or large number of physicians. The more it is spread out, the less it impacts the physician's individual patient decisions. Similarly, the number of plans a physician contracts with also impacts proximity. Multiple contracts will likely dilute proximity if the physician has patients fairly equally distributed among the multiple plans. However, the full effects of multiple contracts are unclear.<sup>24</sup>

A key component that defines proximity is the relationship of the payment made to the medical group or independent practice association (IPA) to the payment they in turn make to the individual physicians. Payment arrangements between health plans, physician groups, and physicians have been described in terms of tiers. In a three-tier arrangement, the health plan is the first tier, the physician group is the second tier, and the individual physician is the third tier.<sup>25</sup> The presence of multiple tiers explains how capitation and risk assumed at one level may not be the same as that assumed by each subsequent level below.<sup>26</sup> Risk under capitated arrangements may or may not get passed on to the lowest tier (the physician). For example, a physician could be part of a medical group or IPA that is fully capitated by an insurer, but the group or IPA could pay the physician fee-for-service or salary (see diagram below). When the risk stays at the group level and does not penetrate down to individual physicians, there is a low level of proximity that corresponds to a low level of influence on the individual physician-patient interaction.



<sup>24</sup> Landon BE, Wilson IB, Cleary PD. "A conceptual model of the effects of health care organizations on the quality of medical care." *JAMA* 1998;279:1377-82.

<sup>25</sup> Hillman AL, Welch WP, Pauly MV. "Contractual arrangements between HMOs and primary care physicians: three-tiered HMOs and risk pools." *Med Care* 1992;30:136-48.

<sup>26</sup> Berwick DM. "Payment by capitation and the quality of care." *N Engl J Med* 1996;335:1227-31.

## Intensity

In addition to proximity, the intensity of the financial incentives is an important determinant of incentives' effects on physician behavior and corresponding patient care. Intensity is determined by the interaction among the four major components listed below.<sup>27</sup>

- **Scope of services.** Scope of services refers to the services that are included in the capitation rate, such as whether PCPs are at risk for only their own primary care services or for some specialty, ancillary, or hospital services as well. The more physicians are at risk for that which they cannot control, the more intense the incentive and the increased probability that it could negatively impact patient care and physician decision making.
- **Amount of potential loss or gain.** Intuitively, the more physicians stand to gain or lose, the more likely the incentive to influence behavior.
- **Timing of bonuses and withholds.** If bonuses are paid quarterly and at the end of a quarter the physician is close to meeting the bonus, the patients seen on the last day of the quarter may receive different care than the patient seen on the first few days of the quarter.
- **Existence of stop-loss provisions.** By protecting physicians from losing large amounts of money beyond a certain threshold, stop-loss provisions decrease the intensity of the financial incentives.

Related to scope of services is the issue of focus of incentives. Focus has to do with the metrics chosen to measure physician performance and the services for which physicians are at risk. Incentives can either have a narrow or broad focus. The more narrowly defined focus, the higher the intensity. For example, if the goal is to save money and cut costs, physicians could either be measured on select measures such as number of hospital days or specialty referrals or more broadly on total dollars spent per year. The former is a more narrow focus in that it tells physicians exactly where to cut costs or watch resource utilization. The latter is broader because it provides an overall targeted outcome and allows physicians the latitude to decide where to save money.

## Interaction

Medical groups typically comprise primary care physicians (PCPs) and specialists. Each may be reimbursed in a different way, and the interaction of these reimbursement methods has important implications regarding behavioral incentives and overall costs of care. While there is wide variation in how PCPs and specialists are paid, there are basically four possible scenarios, as depicted in **Figure D**.<sup>28</sup>

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<sup>27</sup> Pearson SD, Sabin JE, Emanuel EJ. "Ethical guidelines for physician compensation based on capitation." *N Engl J Med* 1997;339:689-693.

<sup>28</sup> Douglas Allen, M.D., PacificCare California Market Medical Director. Personal communication, 1998.

Figure D

	FFS	PCP	Capitation
FFS	Overutilization Model <b>Incentives to do more on both sides. Neither type of physician at risk.</b>		Financially Tricky Model Potential to encourage passing off patients to physicians who typically utilize more expensive resources.
<b>Specialist</b>			
Capitation	Auto Regulated Model <b>No barrier for PCPs. Attempting to control more expensive side by capping the specialists.</b>		Not My Problem Model Monitoring to ensure neither group dumps patients off on the other. Run the risk of no one taking complete responsibility for a patient and everyone having incentive to underserve.

Depending on how each physician is compensated, there are implications for what type of behavior will result. For example, under the model labeled “Financially Tricky,” PCPs are capitated and specialists are paid fee-for-service. The specialty care is the expensive part of the equation, yet under FFS reimbursement, specialists have an incentive to provide more services. To control costs, managers must watch the specialty side. However, due to the clinical complexity, especially for costly sub-specialty care, it’s very difficult to micro-manage the specialists and monitor their utilization to ensure that the services they’re ordering and providing are necessary and appropriate.<sup>29</sup> It is worth noting, however, that this model is the most common one in use today.

The disproportionate percentage of health care spending on specialty care combined with the belief that specialists may be better able to manage the associated clinical dollars lends support to capitating the specialists. Capitating both specialists and PCPs (“Not My Problem”) presents its own set of challenges. With both groups capitated, the fear is that patients will get passed back and forth between the groups. Since neither receives any more money for seeing the patient, each will benefit more if they can hand the risk off to the other one. However, on a positive note, if PCPs receive bonuses that are tied to the number of specialty referrals, capitating the specialists will ease the pressure on the PCPs not to refer to specialists. The specialists may find capitation attractive because it allows them to lock in a certain flow of patients and dollars.<sup>30</sup>

The other option, to capitate specialists and pay the PCPs fee-for-service (“Auto Regulated”), seems to be the most attractive model.<sup>31</sup> While paying PCPs fee-for-service does not eliminate the incentive to provide more services, the services provided by PCPs are typically not the ones that are driving up health care costs so rapidly. The PCPs have an incentive to provide as much care as medically appropriate in the primary care setting. By being capitated, the specialists have an

<sup>29</sup> Ibid.

<sup>30</sup> Bodenheimer TS, Grumbach K. “Capitation or decapitation: keeping your head in changing times.” *JAMA* 1996;276:1025-31.

<sup>31</sup> An example of an HMO attempting this with their physician groups is Sutter Health in Sacramento, CA. For more information see Robertson K. “Capitation catharsis.” *Sacramento Business Journal*, November 23, 1998.

incentive to carefully use their resources and send the patients back to the primary care setting as soon as they are ready.

Perhaps the most important thing to keep in mind is that different models work better in different markets and that it is possible to start in one model and phase into another as particular market conditions or organizational structures change and evolve.

## What Makes a Financial Incentive Successful

### Key Decisions

There are several key “risk and return” thresholds to consider when structuring a financial incentive system and predicting any potential conflicts of interest they may cause. Important considerations include:<sup>32</sup>

- How many physicians should share collectively in risk pools so that the incentive is neither too intense nor too diluted.
- The percentage of total salary that the incentive or bonus represents.
- Whether the incentive is based on individual or group performance.
- What percentage of patients must be covered by capitation in order for the physicians’ behavior to be influenced by the reimbursement. (While this is a consideration, the number of patients often results from market and group characteristics and may not be under physician control.)
- How many capitated lives (an absolute number) must physicians or groups have in order to achieve adequate actuarial spreading of the risk.
- Whether there is a percentage of the proprietary ownership in the group that causes behavioral change.

Generally, incentives should not be too proximate or too intense. There is danger in tying physician’s financial risk too closely to specific, individual patient care decisions that could result in underutilization or denial of care.<sup>33</sup> When a physician is with a patient, the method in which he or she is reimbursed for that patient should not unduly influence the care decision regarding necessary additional tests, services, or referrals.

A recent study asked 1,336 physicians how they felt about financial incentives: 40% of the physicians had contracts with some type of incentive (although this is believed to be understated).<sup>34-35</sup> “Physicians whose bonuses depended on the number of referrals to subspecialists and on measures of productivity had higher levels of anxiety and concern that they might be

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<sup>32</sup> Hillman AL. “Financial incentives for physicians in HMOs.” *N Engl J Med* 1987;31:1743-48.

<sup>33</sup> Berwick DM. “Payment by capitation and the quality of care.” *N Engl J Med* 1996;335:1227-31.

<sup>34</sup> Grumbach K, Osmond D, Vranizan K, et al. “Primary care physicians’ experience of financial incentives in managed care systems.” *N Engl J Med* 1998;339:1516-21.

<sup>35</sup> The author lists two possible limitations of the study: physicians self-reported (which may have resulted in financial incentives being underreported) and the responses were not correlated with actual practice patterns and patient outcomes. The strength of the study is that it measures physicians’ perceptions as opposed to what may actually be in place (and perception is reality).

compromising patient care than physicians whose bonuses were indexed to the quality of care or to patient satisfaction."<sup>36</sup>

## Design Factors

There are a number of design factors that can mitigate conflicts of interest and attempt to balance proximity and intensity.

- Some commentators suggest that PCPs should be at risk only for primary care services, i.e., those services that are directly under their control.<sup>37</sup> "The services covered under capitated contracts should be those about which the risk-bearing entity can make relevant, clinically prudent choices, not those over which the entity has little or no influence."<sup>38</sup>
- Physician's income should not be at risk for more than 20%.<sup>39</sup> The Health Care Financing Administration's (HCFA) Physician Incentive Rules, effective January 1997, "require plans to disclose financial incentives and pay for stop-loss insurance so that no more than 25 percent of a physician's income is at risk under capitation."<sup>40</sup> In reality it appears that an average physician receives only 7% of her net income from bonus arrangements.<sup>41</sup> That same study found that 58% of the physicians' bonuses were based on a combination of individual and group performance. This also eases financial pressures on individual physician-patient interactions.
- Capitation should be used only in groups that have a large enough pool of patients and physicians over which to spread the risk.<sup>42</sup>

To defend against critics who might charge that supporters only endorse capitation when the decisions are shielded from costs, Berwick proposes that "... capitation most safely affects individual decisions through the intermediate filters of group process, consensus among peers, and clinical-policy formulation . . . to induce physicians in group practices to consider the costs and benefits of clinical-management patterns for patients of a general type in the longer run."<sup>43</sup> This viewpoint implies that capitation is best thought of as a backdrop to clinical care.

Included in the **Appendix** are summaries of two different compensation models: one is a staff model on the East Coast and the other a family practice group. They illustrate the extent to which the general principles mentioned above are being followed. Note that neither example contains a quality measure, which is an issue that be touched on in a later section. Although there are

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<sup>36</sup> Kassirer JP. *N Engl J Med* 1998;339:1543-45.

<sup>37</sup> Pearson SD, Sabin JE, Emanuel EJ. "Ethical guidelines for physician compensation based on capitation." *N Engl J Med* 1997;339:689-693.

<sup>38</sup> Berwick DM. "Payment by capitation and the quality of care." *N Engl J Med* 1996;335:1227-31.

<sup>39</sup> Pearson SD, Sabin JE, Emanuel EJ. "Ethical guidelines for physician compensation based on capitation." *N Engl J Med* 1997;339:689-693.

<sup>40</sup> Health Care Financing Administration, January 28, 1997 Managed Care and Medicaid Fact Sheet. Available from <http://www.hcfa.gov>; Internet; accessed Oct 1998.

<sup>41</sup> Grumbach K, Osmond D, Vranizan K, et al. "Primary care physicians' experience of financial incentives in managed care systems." *N Engl J Med* 1998;339:1516-21.

<sup>42</sup> Pearson SD, Sabin JE, Emanuel EJ. "Ethical guidelines for physician compensation based on capitation." *N Engl J Med* 1997;339:689-693.

<sup>43</sup> Berwick DM. "Payment by capitation and the quality of care." *N Engl J Med* 1996;335:1227-31.

theoretical and real arguments in favor of incorporating quality into incentive compensation formulas, in practice productivity seems to make up a majority of the models.

## Impact of Financial Incentives

Academic debate about physician reimbursement methods focuses on issues such as equity, access, underutilization, and conflicts of interest. However, it is in fact surprisingly difficult to assess the effects of compensation structures and payment mechanisms on utilization and quality. Many of the reasons for this have already been mentioned, such as the tiers between payers, groups, and physicians and variability in the actual percentage of compensation that is incentive based. Perhaps most important is the actual physician's awareness of the incentives. Uncertainty arises when there are multiple contracting arrangements which means an individual physician may have many patients with several different reimbursement structures. Regardless of the number of contracts and patients, physicians still may not know exactly how the incentives impact them. "Over one third of the physicians who reported facing incentives could not specify the full amount of income that was involved in bonus payments, suggesting that many physicians may not truly know the extent to which they are at financial risk."<sup>44</sup> Conversely, one physician leader out in the field stated that physicians do realize what they're being paid for. They know according to which plan they're contracting with whether that patient is member of a plan that pays FFS or capitation. While he does not believe that affects what services the physicians provide, he does believe it influences how many times they want to see the patient and in what setting.

Nonetheless, numerous studies have attempted to measure the impact of financial incentives on the provision of health care. One review of these studies suggests that:<sup>45</sup>

- "... resource use is lower for HMO enrollees, even when the same doctors care for HMO and fee-for-service patients; few studies suggest, however, that these decreases have been imprudent or have caused the health status of patients to worsen."
- "What can be said with certainty is that the empirical literature as a whole so far does not make capitation out to be the villain that some believe it is. . . . If anything, the data suggest hazards and ethical problems in the overuse of services in fee-for-service settings, rather than its underuse in capitated care."
- "The strongest negative finding to date about the performance of HMOs has been the observation in the Medical Outcomes Study that fee-for-service patients were more satisfied than HMO patients with their visits to physicians' offices."

Another review analyzed 37 peer-review studies, conducted between the last quarter of 1993 and the last half of 1996/early 1997, that compared managed care with fee-for-service plan performance. The authors of this review concluded that, although the quality data is rather poor, there is no evidence to show that HMOs invariably result in lower quality of care.<sup>46</sup>

While in general there is little evidence that managed care and capitation produce the negative outcomes that its critics claim, careful attention needs to be paid to the less-privileged subgroup of the general population. For example, one study clearly demonstrated adverse outcomes

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<sup>44</sup> Grumbach K, Osmond D, Vranizan K, et al. "Primary care physicians' experience of financial incentives in managed care systems." *N Engl J Med* 1998;339:1516-21.

<sup>45</sup> Berwick DM. "Payment by capitation and the quality of care." *N Engl J Med* 1996;335:1227-31.

<sup>46</sup> Miller RH, Luft HS. "Does managed care lead to better or worse quality of care?" *Health Aff* 1997;16:7-23.

for vulnerable groups, specifically the low-income, chronically ill, and elderly patients. “The Medical Outcomes Study and the Medicare home health study provided evidence that at least some ill, elderly HMO enrollees had worse quality-of-care outcomes than their fee-for-service counterparts. The Medical Outcomes Study provided similar evidence for chronically ill persons in relatively worse health and with relatively low incomes. On the other hand, other studies found similar or better quality outcomes for vulnerable populations.”<sup>47</sup>

However, all of these academic studies to date frequently suffer from a number of methodological limitations, including small sample size, outdated findings, improperly risk-adjusted data, assessment of only short-term outcomes, selection bias of patients studied, and inability to separate reimbursement effects from other influencing factors.<sup>48,49</sup>

## Safeguards

Professional ethics and norms are one of the best natural defenses against financial incentives improperly influencing physician behavior. However, it is prudent to have safeguards in place to ensure that the pull of financial incentives does not become too overpowering. It is also important to be aware of any potential unintended or adverse effects that may be occurring as a result of financial incentives.

An area where adverse effects may be manifested is in the culture of an organization. One physician group reported that their turnover has been increasing and now stands at 10%. This negatively impacts patient care continuity as well as organizational culture, and any correlation between turnover and the compensation and incentive structure must be monitored. Anecdotal evidence suggests that financial incentives may negatively impact physicians’ willingness to volunteer their time and expertise which has ramifications for uninsured patient care as well as medical education. Regarding medical education, it is important to protect the culture and integrity of the medical profession to ensure that it continues to be one that attracts highly qualified students. Upholding integrity is also crucial for maintaining the trust in the patient-physician relationship. For example, a recent study found that a higher percentage of patients “trust physicians to put patient’s well-being above keeping down costs” under indemnity insurance compared to salary, capitation, or FFS managed care.<sup>50</sup> Patients must not perceive that their care is being compromised in any way. Furthermore, physicians must be fairly compensated for caring for patients of different complexity so that physicians are not motivated to see only the healthy, inexpensive patients.

There are several checks and balances that can be employed to balance the role that financial incentives play in influencing physician behavior. The use of quality measures is an integral part of achieving this balance. One key element of the reporting of quality measures and submission of HEDIS<sup>51</sup> data by plans is that the information is for public use. This keeps everyone conscious of the need to ensure that undertreatment does not occur.<sup>52</sup> Another way quality measures are used is by calibrating financial incentives to quality outcomes, either as measured clinically or in terms of patient satisfaction. Although it is difficult to know what and how to measure clinical quality, quality measures are becoming more refined and are increasingly being linked to physician

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<sup>47</sup> Ibid.

<sup>48</sup> Berwick DM. “Payment by capitation and the quality of care.” *N Engl J Med* YEAR; 1996;335:1227-31.

<sup>49</sup> Miller RH, Luft HS. “Does managed care lead to better or worse quality of care?” *Health Aff* 1997;16:7-23.

<sup>50</sup> Kao AC, Green DC, Zaslavsky AM, et al. “The relationship between method of physician payment and patient trust.” *JAMA*, 1998;280:1708-1714.

<sup>51</sup> HEDIS stands for Health Plan and Employer Data and Information Set. It is a standardized set of performance measures used to evaluate health plans.

<sup>52</sup> Meredith Rosenthal, Ph.D., Harvard School of Public Health. Personal communication, 1999.

compensation. For example, a capitated physician can receive an “add-on” type reimbursement for performing specified services, defined as such by the group or the plan because those services are important indicators that patients are receiving quality health care. Patient satisfaction is also playing a larger role in how physicians are compensated. A related measure, physician access, is also a factor in some compensation structures. Some groups that capitate their PCPs guard against them shifting patients to other PCPs by penalizing the original PCP when his or her patients are seen by another PCP in the office. Another access measure is the number of new enrolled members seen by their PCP within a fixed time period after enrollment. A major obstacle to using quality measures is that they are difficult and costly to collect. This might explain why they are not used more in practice today.

More widely used are a variety of practice changing strategies and support mechanisms to help physicians respond to incentives and achieve cost efficiency but not decrease quality of care. “The majority of the managed care plans try to control costs not by paying individual doctors on a capitated basis but rather through utilization review, requirements for precertification, or withholding of a percentage of income against potential deficits (the economist Alain Enthoven calls such methods ‘virtual capitation’).”<sup>53</sup> Benchmarking is another excellent example. Identifying “best practices” in care outcomes and resource utilization and sharing that information with individual physicians gives them the tools necessary to provide high quality yet cost-efficient health care. It is possible to measure physicians on a wide range of measures, but just knowing what is being measured is not enough. Physicians also need to be given the tools and techniques to achieve those measures.

Two other important safeguards are risk-adjusted capitation rates and stop-loss insurance. Instead on reimbursing physicians one capitation rate for all patients, risk-adjustment assigns a different PMPM capitated rate to patients based on certain severity, complexity, and utilization factors. These adjustment factors are generally based on age, gender, or disease. Risk adjustment is important because it allows physicians to continue to treat high-cost or high-risk patients and helps guard against even unintentional risk selection of only healthy patients. Stop-loss insurance provides an upward limit to a physician’s financial risk for the health care expenditures on an individual patient. Stop loss can either be at the individual patient level or at the aggregate level. For example, a physician caring for a patient who ends up needing \$100,000 in medical treatment would not be responsible for any costs once they exceed \$40,000. Without stop loss insurance, individual physicians are at much greater financial risk.

## What’s Next

The biggest observable trend is a move toward capitating specialists. In response to the recognition that PCPs are not the primary cost drivers and do not have control over specialty utilization, attempts are now being made to manage costs in the specialty realm. While there are some advocates for shifting PCPs back to fee-for-service, that is more difficult to do than it might appear and does not seem to be happening in large numbers.

One new method of capitating specialists is called contact capitation. Under contact capitation, “Each physician is credited with one referral, or ‘contact,’ for a predetermined time period—generally six months to one year—for each member referred by the primary care physician. The specialist assumes responsibility for the referred member during that time.”<sup>54</sup> The total pool of capitated funds available for a particular specialty is divided by the total number of “contacts” for all the physicians. Individual physician compensation is determined by multiplying each physician’s

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<sup>53</sup> Berwick DM. “Payment by capitation and the quality of care.” *N Engl J Med* 1996;335:1227-31.

<sup>54</sup> Contact capitation: the coming craze for specialists? *Capitation Management Report* 1998;5:1-6.

number of contacts by the dollar/contact amount. The biggest downsides are administrative complexity and lack of physician buy-in. Upsides include that it forces specialists to compete for PCP referrals and preserves patient choice.<sup>55</sup>

Regardless of where the next trend leads, the information contained in this note highlights several discoveries that will be important for managers designing physician compensation and incentive programs. First, financial incentives are being used much less aggressively than might have been originally expected. Second, the nature of the contracts and presence of multi-level tiers are effectively insulating individual physicians from a large part of the risk inherent in financial incentives. Third, the percentage of actual income at risk and based on incentives is much lower than expected. Fourth, although the data needs improvement, there is no evidence to support that managed care results in worse health outcomes. The possible exception to this is for vulnerable populations, but they may start from a comparatively worse position and be at an inherently greater risk from the outset. What the evidence does support is that financial incentives are powerful and physicians do respond. In California, for example, capitation has slashed utilization; in 1992 they had 254 commercial inpatient bed days per thousand compared to 495 for the national average.<sup>56</sup> While this is evidence that capitation works, it remains to be seen if its results are sustainable now that most of the “low hanging fruit” is gone. Finally, there is no algorithm for practices to follow to ensure success under this method, and some practices are clearly doing better than others. Characteristics that seem to differentiate physician practices that fare well under capitation include strong leadership in whom physicians trust, tight internal risk management processes and a well-run business office. Perhaps most important is that the physicians are willing to change and that the practice was in good financial shape prior to capitation.

Although reality seems to be much less dire than imagined, that does not mean financial incentives should become the primary mechanism for influencing and changing physician behavior. Financial incentives are more likely to be effective when carefully coupled with other interventions and used as a backdrop for motivating change. “Those who truly desire to improve will recognize that, in the right organizational environment and guided by the right values, capitated payment can provide a rational financial context that vastly increases the opportunities for doctors and system managers to make changes that result in better and more efficient care for patients and communities.”<sup>57</sup> Capitation can be a tool that drives improvements in terms of patient well being and cost reduction by forcing better coordinated and organized care, but other support systems, such as education and profiling, must also be in place.

Financial incentives are just one tool for influencing physician behavior, and there are significant gains to be made through careful coordination of all management interventions that can influence behavior. “. . . Leaders must come to see pay for what it is; just one element in a set of management practices that can either build or reduce commitment, teamwork, and performance. Thus . . . make sure that pay practices are congruent with other management practices and reinforce rather than oppose their effects.”<sup>58</sup>

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<sup>55</sup> Geof Baker, Managing Director, Physician Management Alliance, Inc. Personal Communication, 1998.

<sup>56</sup> See Bohmer R. “Note on Managed Care.” HBS case 9-698-060.

<sup>57</sup> Berwick DM. “Payment by capitation and the quality of care.” *N Engl J Med* 1996;335:1227-31.

<sup>58</sup> Pfeffer J. “Six dangerous myths about pay.” *Harvard Business Review* 1998;76:109-19.

## Appendix

### East Coast Staff Model HMO

This is a multispecialty practice plan that fully employs all of its physicians (primary care and specialty). Beginning in January 1, 1999, they will be changing their compensation system from one that is full salary to one that is salary (fixed component) plus incentive (variable). Twenty-five percent of the total is variable for which the individual physicians are at risk.

<p style="text-align: center;"><b>Base Compensation</b> (fixed salary)</p> <ul style="list-style-type: none"> <li>- Standard base (based on market rates)</li> <li>- Seniority</li> <li>- Board Scores</li> </ul>	<p style="text-align: center;"><b>Incentive</b> (variable)</p> <ul style="list-style-type: none"> <li>- 1/3 Work Effort</li> <li>- 1/3 Care Experience</li> <li>- 1/3 Citizenship</li> </ul> <p>*Each clinic may choose which measures to use to define each of the three categories. See below.</p>
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- **Withhold.** There is a 10% withhold. The group keeps 10% from each doctor. The doctors receive it back if the whole group (all sites) does ok. It can be graduated to get the % back that is available (i.e., if only have 5% left).

#### Incentive Portions

*(Note: There is a buffer that protects physicians from wide swings in compensation. The variable compensation can't increase more than 6% or decrease more than 3% every 6 months.)*

<p><b>Work Effort:</b></p> <p>Unadjusted Panel Size (a)</p> <p>Adjusted Panel Size (b)</p> <p>Visits/Panel MD Seen (c)</p> <p>Visits/Panel MD/APC Seen (d)</p> <p>Encounter RVUs (e)</p> <p>Telephone RVUs (f)</p> <p>Total RVUs (g)</p> <p>Total Visits (h)</p> <p>Percent of Others Seen (i)</p>	<p><b>Care Experience:</b></p> <p>Accessibility Scale</p> <p>Clinician Care Scale</p> <p>Care Experience Total</p> <p>Percent Panel Seen to MDs (j)</p> <p>Percent Panel Seen to MDs/APCs (k)</p>	<p><b>Citizenship (l)</b></p>
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- a) Defined as percent of target panel size for your site (includes increased panel capacity offered by mid-level providers) unadjusted for age-sex or complexity.
- b) Defined as percent of target panel size for your site (includes increased panel capacity offered by mid-level providers) adjusted for complexity (age-sex adjustment).
- c) Defined as the number of visits a distinct MD generates, divided by all IM/AUC MD visits that are generated for their panel.
- d) Defined as the number of visits a distinct MD generates, divided by all IM/AUC MD/APC visits that are generated for their panel.
- e) Defined as the visit RVUs/FTE\* that an individual physician generates. Visits RVUs generated by precepted residents are added to the preceptor's visits RVUs.
- f) Defined as the total telephone RVUs/FTE\* that an individual physician generates. Telephone RVUs generated by precepted residents are added to the preceptor's telephone RVUs.
- g) Defined as the total RVUs/FTE\* including ambulatory, FFS, hospital and telephone (adjusted for resident work as noted above).
- h) Defined as total visits/FTE\* generated by an individual physician. Visits generated by precepted residents are added to the preceptor's total visit rate.
- i) Defined as the % of an MD's total visits dedicated to seeing other clinicians' patients.
- j) Defined as visits for own patients/visits to all providers in MDs in IM/AUC.
- k) Defined as visits for own patients/visits to all providers in MDs/APCs in IM/AUC.
- l) Citizenship is a way to acknowledge local contributions to the practice not accounted for by the other measures. This measure may include such things as availability to colleagues, committee work, morbidity of panel, special projects, etc. Each department will determine a mechanism to create a point scale to quantify citizenship contributions.

\*For clinicians with excessive absence (due to: vacation beyond one week per quarter, sabbatical, military leave, bereavement, leave of absence, jury duty), the FTE used in this measure is adjusted downward to account for this absence.

### Family Practice Group<sup>59</sup>

This is a six-member physician group who wanted to develop a fair, cost-efficient compensation formula that would allow them to survive in a managed care environment. Their model is salary plus incentive.

<p style="text-align: center;"><b>Salary (fixed)</b></p> <ul style="list-style-type: none"> <li>- Base salary is 75% of prior year's mean W-2 earnings.</li> <li>- Required to have worked 90% of "mean number of days worked per year for physicians in the office" and "have had 90% of mean number of office visits." (regardless of complexity)."</li> </ul>	<p style="text-align: center;"><b>Individual Incentive Pool (variable)</b></p> <ul style="list-style-type: none"> <li>- Based purely on individual doctor – not on an equal share basis.</li> <li>* See below.</li> </ul>	<p style="text-align: center;"><b>Site Incentive Pool</b></p> <ul style="list-style-type: none"> <li>- "Divided equally among all the principals of the group (that is, the owner/partner doctors) as this reflects group effort and efficiency."</li> </ul>
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- Withhold/holdback. They are holding back a 5% "war chest" and the remainder is a "distributable variable profit" to be used for the individual and site incentives.

### Individual Incentive Portion

*Individual Incentive Pool % Components:*

Seniority	5%
Quality	0% <sup>60</sup>
Patient Satisfaction	0% <sup>60</sup>
Administration	0%
Special Qualifications	5%
Productivity	20%
Citizenship	10%
Panel size or capitated lives	20%
Resource Utilization	10%
Overhead/cost control	30%

<sup>59</sup> Greenfield, William R, MD. "In search of an effective physician compensation formula." *Family Practice Management*; October 9, 1998.

<sup>60</sup> They did not feel their quality and patient satisfaction data was meaningful enough to be included at this time.