

Can Pay-for-Performance be Ethical? An Analysis by the Society of General Internal Medicine Ethics Committee

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EXECUTIVE SUMMARY

Pay-for-performance compensation systems are proliferating, yet their impact on key stakeholders remains uncertain. This paper explores ethical dimensions of pay-for-performance within a framework that considers its fundamental and guiding principles, its process of implementation, and its potential effects on patients and physicians. It then proposes recommendations for ensuring ethical and effective performance-based physician compensation.

Fundamental and guiding principles of pay-for-performance. These include rewarding quality health care and aligning physicians' financial incentives with the best interests of patients. Although this inherent appeal to physician self-interest might be in tension with professional ideals of altruism and beneficence, the principles that inform pay-for-performance are not inherently unethical. It seems just, for example, to financially reward physicians who demonstrate outstanding levels of patient-centered and evidence-based care. Nevertheless, current pay-for-performance approaches are guided by a flawed understanding of health care quality. This understanding typically equates quality with the achievement of non-individualized, pre-determined health goals for broad populations and fails to consider contributions from stakeholders other than physicians (such as health plans) that also have partial responsibility for ensuring quality.

Implementation of pay-for-performance. The process of implementing pay-for-performance can be criticized from an ethical perspective because of significant potential for unintended consequences but scant data regarding its impact. It is unclear, for instance, why a drug used by a few dozen individuals requires proof of safety and efficacy before use, while policy changes affecting hundreds of millions of individuals do not. Current pay-for-performance systems generally lack key safeguards as well as monitoring and the Ethics Committee is concerned that significant adverse effects may be unfolding under them.

Potential effects of pay-for-performance. The quantification of quality is notoriously difficult, and basing payment incentives upon inadequate measures of quality could generate potentially dangerous consequences for patients, physicians, and society. For example, it seems reasonable to require that diabetic patients achieve hemoglobin A₁C levels below 7.0. However, in patients with previous hypoglycemic episodes this target might in fact be dangerous. Or, in a particularly difficult to control patient, a decline in hemoglobin A₁C from 10.0 to 9.0 might be a remarkable achievement and more validly represent high quality care than a decline from 7.3 to 6.9. Physicians may terminate clinical relationships with such difficult patients in order to avoid financial penalties. Poorly designed pay-for-performance systems may therefore be limiting access to care for vulnerable populations, eroding patient trust, and fostering breeches of professionalism. Even well-designed systems will have unintended consequences.

Recommendations. Given these concerns, calling for a moratorium on pay-for-performance until proven safe and effective is a consideration. However, the Ethics Committee recognizes that implementation is already widespread and that calls for a moratorium now would likely be ineffective. In addition, despite significant flaws in current systems and uncertainty regarding the ultimate marginal value of even well-designed arrangements, financially rewarding high quality remains a fundamentally sound principle, implying that developing systems meticulously would at least be worth exploring. We therefore advocate the following four

major strategies to transition from risky pay-for-performance to high quality health care and ethical performance-based physician compensation:

1. Current pay-for-performance systems should rapidly adopt safeguards to protect vulnerable populations. A practical short-term strategy includes balancing current population-level measurements with the best available measures of quality from the patient perspective, stabilizing the percentage of physicians' salaries at stake, and providing adequate off-setting compensation for physicians serving vulnerable patients. Population-level measures should be evidence-based, clearly linked to valued patient outcomes, and should assess domains clearly within the influence of physicians or physician groups. To provide optimal data and avoid statistical error, pay-for-performance should emphasize measures at the level of large physician practice groups rather than the individual physician. Improvement toward goals in addition to achievement of cut-points should be assessed. The use of population-level *outcomes* measures creates complexities that likely preclude their implementation in an ethically defensible manner in the short-term. However, if pay-for-performance systems utilize such measures, they should carefully adjust for case-mix and the physician's degree of responsibility in improving the particular measure. Policy makers overseeing current pay-for-performance systems should initiate monitoring of key patient and physician outcomes before and after implementing the above changes.
2. Key stakeholders should develop consensus regarding their responsibilities in improving health care quality. For example, to improve blood glucose control among diabetic patients, physicians must recommend evidence-based, patient-centered management strategies, practice groups must provide access to testing facilities, health insurers must facilitate receipt of affordable medications and testing, and patients must adhere to therapeutic plans. Bringing health insurers, patients, employers, and physicians to the table would highlight opportunities to improve coordination and continuity of care; new paradigms for quality improvement that integrate assessment at the individual physician level and institution level could emerge.
3. Researchers and policy makers should develop valid and comprehensive quality measures for use in the next generation of compensation systems that reward genuine quality. A long-term strategy for quality improvement will be guided by a framework of accountability in which physicians, practice groups, health plans, and public payers are measured based on how well they fulfill well-defined obligations to individual patients and populations.
4. Researchers and policy makers should use a cautious evaluative approach to long-term development of compensation systems that reward quality. After developing evidence-based measures of physician, health care institution, and population-level quality, policy makers should implement carefully planned, small-scale pilot programs that reward physician and health care institution quality. Benefits and adverse effects should be monitored.

Conclusions. Performance-based physician compensation, if carefully guided by a comprehensive understanding of health care quality and evidence-based evaluations, might improve patient care, narrow health disparities, and promote fair physician compensation while increasing health care value. If research and monitoring determine that improved payment systems can benefit patients, physicians, and payers while minimizing risks, they could be ethical arrangements. However, until such data are available, SGIM considers the widespread expansion of untested pay-for-performance systems to be ethically misguided because of the potential for adverse consequences for all key stakeholders.

Abstract

Pay-for-performance is proliferating, yet its impact on key stakeholders remains uncertain. The Ethics Committee of the Society of General Internal Medicine systematically evaluated ethical issues raised by performance-based physician compensation. We conclude that current arrangements are based on fundamentally acceptable ethical principles but are guided by an incomplete understanding of health care quality. Furthermore, their implementation without evidence of safety and efficacy is ethically precarious because of potential risks to stakeholders, especially vulnerable patients. We propose four major strategies to transition from risky pay-for-performance systems to ethical physician compensation and high quality care. These include implementing safeguards within current pay-for-performance systems, reaching consensus regarding the obligations of key stakeholders in improving health care quality, developing valid and comprehensive measures of health care quality, and utilizing a cautious evaluative approach in creating the next generation of compensation systems that reward genuine quality.

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I. Introduction

Between 1998 and 2003, three major studies suggested that health care quality in the United States was suboptimal.¹⁻³ In 2001, the Institute of Medicine released the landmark health care quality study, “Crossing the Quality Chasm.”⁴ This report recommended that purchasers reward health care improvement by aligning quality and payment incentives -- a policy commonly referred to as “pay-for-performance.” It also emphasized that quality care maximizes safety, effectiveness, patient-centeredness, timeliness, efficiency, and equity. Major employers reacted by forming entities such as the Leapfrog Group and Bridges to Excellence -- coalitions focused on rewarding and recognizing improvements in safety, quality, and affordability. Unabated health care inflation⁵ has added to payers’ desire for quality comparison data, and both public and private purchasers have begun demanding improved care by physicians.^{6,7} The Centers for Medicare and Medicaid Services have instituted several preliminary pay-for-performance efforts and performance-based physician compensation is widespread among private health plans.^{6,7}

As articulated by Epstein,⁶ the pay-for-performance movement has four essential goals: (1) to create structural changes that reward improvements in quality, (2) to decrease errors and increase efficiency, (3) to encourage management of health at a population level, and, (4) to encourage physicians to “get it right the first time” rather than relying on expensive retrospective assessments. Commentators have also suggested that another major goal of pay-for-performance is to reduce health care costs and protect patients from iatrogenic illness by increasing the ratio of necessary to unnecessary care.⁸

Delivering only the “right” care is in the best interest of patients, physicians, payers, and society at large. Carefully instituted pay-for-performance systems could move the health system closer to that ideal, improving the quality of patient care, the fairness of physician compensation, and health care value. Specific provisions could enhance the doctor-patient relationship and reduce health care disparities among the poor and chronically ill.

However, translating the idea of pay-for-performance into an effective and ethical system may prove challenging for various reasons. Often, there are no evidence-based recommendations for specific clinical scenarios. Many decisions involve a complex combination of physician judgment and patient preferences, so that the establishment of norms for making global assessments of the quality of care is a challenging task. A valid and comprehensive assessment of the quality of care would include difficult-to-measure traits and skills such as diagnostic precision, empathy, listening ability, and coordination of care, all highly subject to potential measurement bias. Inaccurate measurement and other design flaws could lead to unintended consequences of great ethical significance, such as decreased access to care for vulnerable patients, deterioration of patient trust, and adverse effects on professionalism.⁹⁻¹⁶

There is scant evidence supporting the efficacy of pay-for-performance or examining its effects on key stakeholders.^{17,18} Not all studies have demonstrated improved quality¹⁸⁻²² and unintended consequences such as adverse selection of patients and gaming of the system have occurred.¹⁸ In addition, improving other health system deficiencies such as health care disparities might have a substantially greater positive impact on population health than any currently envisioned pay-for-performance programs.²³ While improving quality and reducing disparities are highly interrelated, they should at least be considered national priorities of equal urgency.

In October 2005, the Society of General Internal Medicine (SGIM) Ethics Committee initiated an in-depth assessment of ethical issues raised by performance-based physician compensation systems. The committee’s primary goal was to explore whether pay-for-performance could be designed and implemented in a manner that

would be ethically acceptable, if not ethically praiseworthy, considering principles such as patient benefit and trust, justice, professional integrity, altruism, and advocacy. This paper first presents key background information needed to assess the ethics of health policy changes in general and pay-for-performance in particular. It then explores issues raised by pay-for-performance within a framework for evaluating the ethical dimensions and effectiveness health policy reform.²⁴ We conclude by presenting four major strategies to ensure the implementation of fair and effective performance-based physician compensation systems.

II. Core values of the Society of General Internal Medicine

SGIM is an international organization of physicians and others dedicated to improving patient care, education, and research related to general internal medicine.²⁵ Core values of SGIM include the promotion of excellence in research, education, and patient-centered, scientifically sound medical care. SGIM encourages social responsibility and seeks collaborative alliances to advocate for the health of vulnerable, under-served, and diverse populations. SGIM supports initiatives by the government and foundations that promote access to care, education of patients, medical research, and constructive relationships between doctors and their patients.²⁵

III. Origins and methods of the Ethics Committee's analysis

The Ethics Committee chose to examine pay-for-performance because of its considerable implications for patients and general internists. The committee began its investigations with a review of pay-for-performance literature followed by debate and discussion. In addition to developing ideas and constructing ethical arguments regarding the morality of pay-for-performance, early discussions concluded that the broader SGIM membership should have a significant voice in shaping a position paper. While the Ethics Committee does not believe that the ethics of a health policy can or should be derived from opinion polling or empirical observation,²⁶ we recognized that SGIM members have a wealth of interests, talents, and practice-related experiences that could lend unique perspectives and contribute innovative ideas regarding pay-for-performance. We also recognized that the complexity of the issue warranted inclusion of expert opinion and we hypothesized that perspectives external to SGIM might illuminate issues not readily apparent to general internists.

To include these diverse perspectives, the committee gathered qualitative data. We organized focus groups at regional SGIM meetings across the country and conducted in-depth, semi-structured interviews with key informants. Key informants included researchers, leaders of large pay-for-performance systems, and leaders of physician groups. These standard qualitative research techniques were used to gather important data to inform and enhance the deliberations of the Ethics Committee.²⁷⁻³⁰ A formal analysis and presentation of the qualitative results will be published elsewhere.

IV. Background: ethical issues in health policy reform and pay-for-performance

Pay-for-performance represents a fundamental change in physician compensation with potentially far-reaching consequences for multiple stakeholders. Our paper primarily considers effects on patients and primary care physicians, though implications for insurance providers and broader society are also discussed.

In this section, we review key background information needed to assess the ethics of health policy changes, particularly pay-for-performance. Based on these considerations, we develop a framework for evaluating the ethical dimensions and effectiveness of pay-for-performance.

IV.1. Characteristics of ethical and effective health policy reform

A proposed change in health policy should address a recognized problem in health care quality, value, or ethics. It should be practical and achievable from a political and economic standpoint. It should be based on principles that are fundamentally ethical and valid and should either be supported by evidence suggesting safety and efficacy or have a high degree of “face-validity” as such a solution. Its enactment should result in fair outcomes and benefits (or at least lack of harm) for all stakeholders. If the proposal has a reasonable likelihood of unintended consequences, its implementation should include provisions for their assessment, monitoring, and minimization.

This description suggests that there are three distinct aspects of a proposed reform that deserve ethical scrutiny: (1) the fundamental principles or assumptions underlying the policy, (2) the “roll out” or method of policy implementation, and (3) the policy’s effects on key stakeholders after implementation. This distinction is necessary because policies will have varying levels of risk and should be implemented in a manner accounting for such risks.

With respect to pay-for-performance, it is apparent that policy makers’ deliberations over the first two aspects above have essentially concluded. Nevertheless, the Ethics Committee considers ongoing reflection on these matters crucial. Ethical analysis can illuminate key moral dimensions of performance-based compensation and help inform more effective and ethical future policy making.

The pay-for-performance movement also raises serious questions about fundamental ethical issues relating to medicine, physicians, and society. These include the meaning of professionalism and the motives and virtues of professionals; the implicit endorsement of a consequentialist form of ethics; and presuppositions about the nature of medicine, economics, and social justice. Many ethicists and members of the SGIM Ethics Committee are concerned about these fundamental philosophical questions. While touching upon some of these, they are largely beyond the scope of the current paper.

IV.2. Traditional physician compensation arrangements

Financial incentives faced by physicians typically originate from three sources: health plan arrangements with physician groups, physician group arrangements with individual physicians, and the average risk the organization experiences from its contractual arrangements.³¹ In recent years, health plan payments to physician groups have been based on physicians’ panel sizes (prospective capitation), on services rendered (retrospective fee-for-service),³¹⁻³⁴ or most commonly, on a combination of both.³⁴⁻³⁸ Under full capitation, the health plan transfers financial risk for the provision of services to the physician group while fee-for-service places the risk on the health plans. Individual physicians’ clinical choices appear to be affected by their specific financial incentives, which are influenced by the methods used for rewarding and assigning risks within varied organizational structures.³⁹⁻⁴⁴ A cascading and complex set of financial incentives often exists, beginning with the health plan but potentially affected by multiple levels of organizational and contractual structures before reaching the individual clinician.³¹

Scant data exist regarding the percentage of capitation versus fee-for-service compensation received by individual physicians and the variation among physician organizations in payment methods.³⁸ Independent practice associations may compensate their physicians by combining individual capitation with fee-for-service for selected procedures or by combining fee-for-service with a prospectively determined bonus.^{36, 37} Integrated medical groups typically pay salaries linked to panel size, productivity, and other factors.³⁸ Because physician group owners receive a share of profits and benefit from the organization’s value (if the practice is sold), they are likely to face additional powerful incentives.^{31, 44, 45} Finally, financial incentives are both influenced and

mediated by factors in the larger market environment, such as the concentration of insurers and provider organizations.⁴⁴

An in-depth discussion of the benefits and drawbacks of traditional compensation methods is beyond the scope of this paper, but a brief overview is useful. Fee-for-service has the benefit of acting as a natural risk-adjuster; physicians serving high morbidity patients needing costly interventions are paid more.³⁸ However, because fee-for-service payments are set above marginal costs (to cover overhead), they are likely to create incentives to provide excess care. This inefficiency encourages and is compounded by the diffusion of new clinical services and technology that would fail cost-benefit analyses.³⁸ From an ethical standpoint, fee-for-service erodes professionalism whenever physicians are induced to increase patient volume excessively at the expense of high quality care.

Capitation essentially creates an opposite set of incentives. Because physicians retain savings generated by reductions in utilization, complexity, or prices, incentives for cost-consciousness are increased. However, under capitation, the financial risk of attracting high morbidity patients transfers to the physician. This can lead to avoidance of vulnerable patients and practice patterns that deliver inadequate levels of service. The use of new clinical services and technology that would pass cost-benefit analyses is discouraged.⁴⁶ Because fulfilling obligations to sick patients is a physician's most essential duty, discouraging such care is hazardous from an ethical perspective.⁴⁷

In practice, medical groups have traditionally attempted to use fee-for-service and capitation to balance needs for individual physician productivity and cost consciousness. However, it seems that this system has contributed little to improving health care quality. While recognizing the need to fix a broken system, we would also suggest that the strong influence of physician compensation on patient care should engender a high standard of evidence for proposed solutions such as pay-for-performance.

IV.3. Characteristics of pay-for-performance systems and evidence of efficacy

A general understanding of how pay-for-performance is being implemented is essential when considering potential effects on key stakeholders. A survey of private insurers found that more than half of health maintenance organizations (HMOs) representing more than 80% of their enrollees used pay-for-performance in their provider contracts.⁴⁸ Programs designed primarily to reward physicians or physician groups were more common than hospital initiatives. Approximately 13% of health plans with physician-oriented pay-for-performance programs focused solely on the individual physician as the unit of payment. Nearly all included measures of the quality of clinical care. Measures of information technology use and patient satisfaction were relatively common elements of physician incentive programs in capitated HMOs, while these were used in approximately 50% of noncapitated plans. In the physician-oriented systems, diabetes care, mammography, and asthma care were the most commonly measured realms of clinical care. Table 1 provides examples of measures of care in these realms as suggested by the National Quality Forum⁴⁹ (though these were not necessarily the measures used by the HMOs surveyed). The bonus potential in physician-oriented incentive arrangements was typically 5% or more of payments from the plan. Approximately one third of these programs were designed to reward only the top-rated physicians or groups. Sixty two percent offered rewards for the attainment of a predetermined performance threshold, 20% explicitly rewarded improvement, and 14 % offered rewards for both attainment and improvement.

Public payers are also beginning to implement performance-based physician compensation. The Centers for Medicare and Medicaid Services currently has a program for voluntary reporting of performance in 36 areas for

Medicare recipients as well as pilot programs that contain small financial incentives for hospitals and physician groups.⁵⁰

An early analysis of a modern prototypical pay-for-performance arrangement suggested that patient process outcomes were minimally improved while bonus payments flowed primarily to physician groups already performing at a high level.⁵¹ A study in the United Kingdom found that, overall, general practitioners performed well in the first year of a pay-for-performance program but practitioners that identified larger numbers of patients as ineligible for quality indicator assessment were most likely to meet the quality target.⁵² In fact, 1% of practices excluded more than 15% of their patients from reporting. A study of Medicare quality reporting found that hospitals with pay-for-performance initiatives had slightly better outcomes compared to hospitals only reporting on measures.⁵³ Petersen and colleagues reviewed studies of performance-based physician compensation, finding evidence of both performance improvement and unintended consequences.¹⁸ Another review detected little evidence to support the effectiveness of paying for quality.¹⁷ A study of the impact of pay-for-performance in Massachusetts found no impact on quality relative to secular trends.⁵⁴

IV.4. What is quality health care?

IV.4.a. Published definitions

If a primary goal of pay-for-performance is health care quality improvement, a clear definition of quality is essential to determine if it has face validity as such a solution. One prominent definition endorsed by the Institute of Medicine states that health care quality is “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”^{4,55} Quality care is further described as safe, effective, timely, equitable, patient-centered, and efficient. Brook et al⁵⁶ characterize quality care as (1) services performed in a technically excellent manner for which the desired health outcomes exceed the health risks by a sufficient margin, and (2) treatment in a humane and culturally appropriate manner with full participation in medical decision-making. Other definitions of quality either resemble Lohr’s or list essential characteristics of a quality health care system such as accessibility, patient-centeredness, effectiveness, efficiency, continuity, acceptability, equity, and legitimacy.⁵⁷⁻⁶¹ Harteloh has characterized these two types of definitions as “prescriptive” and “descriptive,” respectively.⁶²

Other commentators have insightfully separated definitions of quality into those for the individual patient and for populations. Campbell and colleagues describe patient-level quality as “whether individuals can access the health structures and processes of care which they need and whether the care received is effective.” Population-level quality is “the ability to access effective care on an efficient and equitable basis for the optimization of health benefit/well-being for the whole population.”⁵⁷ Similarly, Blumenthal has described population-level quality for health plans as the extent to which care meets group needs of members. He also argues that when resources are scarce, quality at a population level may be improved by rationing care.⁶³ This is an important but infrequently discussed point that is obscured by the Institute of Medicine definition. Chassin and Galvin, expanding upon the Institute of Medicine understanding of *population* health care quality, only go as far as to say, “... we must ask whether all parts of the population have access to needed and appropriate services and whether their health status is improving.”² And while commentators have often addressed stakeholders’ differing perspectives on quality, surprisingly little discussion has centered on who is responsible for ensuring quality care and their obligations.

IV.4.b. Limits of published definitions

The Ethics Committee concurs with many elements of the definitions above, but recognizes that each has limitations, especially during an era of quality measurement and resource constraints. To accurately measure quality and quantitatively assess the impact of pay-for-performance, a definition that is both more specific and more comprehensive is needed. Although diverse stakeholders are likely to characterize quality differently, we concur with Blumenthal⁶³ that establishing a consensus definition should be key goal of the quality movement. At an operational level, definitions are best left to particular health care groups or specialties, but a framework describing the entities responsible for ensuring quality and their obligations should be useful. And because pay-for-performance focuses heavily on measuring physicians, there is added need for physicians to articulate a common understanding of quality. This could facilitate the transition from pay-for-performance to “pay-for-quality.” After reviewing the moral foundation of health care and the stakeholders responsible for ensuring quality, we propose a basic framework below.

IV.4.c. Quality health care for individual patients

The central act of healthcare is a response to the needs of individual patients whose inherent human dignity engenders an obligation to provide respectful, compassionate, and competent care.⁶⁴ Fulfilling the specific, patient-level duties that arise from this essential obligation is therefore the central component of quality health care. The starting point and most vital factor for sustaining the physician in fulfilling these duties is the patient-physician relationship. This is made necessary by the complexity of medical care and the patient’s need for an advocate and collaborator to achieve health goals.

Quality for individuals therefore equates with how well the central act of healthcare is accomplished, i.e., *the degree to which appropriate healthcare obligations to the individual patient are fulfilled.*

Who is responsible? The physician, as the primary advocate for the patient, has a central role in ensuring quality. Organizations facilitating patient-physician goals such as physician groups, hospitals, ancillary services, and public and private payers also have vital responsibilities to the patient. It is therefore useful to divide the entities responsible for ensuring *patient*-level quality into the physician and the health care organizations supporting the patient-physician relationship. To a great extent, the patient has no responsibility at this level because the health care system exists *for* the patient. The Institute of Medicine definition largely implies this notion. From this perspective, the health system has a certain preexisting level of quality independent of the patient’s activities. An analogy would be a restaurant of known high quality; eating far too much or too little or not even dining there does not affect the *restaurant’s* level of quality for the particular customer (though it could affect the individual’s goal of having a good dinner).

IV.4.d. Quality health care for populations

Because healthcare is fundamentally individualized, the essential indicator of quality population care remains high quality *patient*-level care. If the water level in a drinking glass were to represent patient-level quality, population-level quality would be defined in terms of processes for maximizing levels in *each* glass across the population. While seemingly obvious, this view contrasts sharply with current approaches to population-level quality (discussed further below).

Of course, short-term resource limitations may preclude patients from having their “glasses” as full as they desire. Such limits, in light of the moral responsibilities engendered by the central act of medicine, introduce three key obligations relevant to quality improvement. Health systems ought first to maximize efficiency before engaging in explicit rationing. Second, savings should be distributed broadly across the population to facilitate

the achievement of patient health goals, perhaps reserving a portion as an incentive for those achieving these efficiencies and distributions. Third, systems ought to promote equitable resource distribution.

Importantly, resource limitations do not preclude a patient-centered understanding of population-level quality; they merely imply that the extent to which care obligations can be fulfilled must be adjusted in light of immediately available resources. Population-level healthcare quality can therefore be defined in terms of *processes* (how the water gets in all the glasses) while fully accounting for *substantive* obligations to individual patients (how much water is in each glass). Such processes can be at the *patient* level as well as the population level. For example, the individual patient theoretically increases healthcare resources available to others through personal health maintenance. Similarly, the individual who receives vaccinations promotes “herd immunity,” i.e. population-level health. Population-level health care quality is therefore *the degree to which care obligations to individual patients are fulfilled while accounting for the degree to which they are fulfilled efficiently and equitably across the population*.

Who is responsible? Because disproportionate resource consumption by particular stakeholders reduces equity and efficiency, the activities of all parties utilizing health care resources affect population-level quality. Physicians and healthcare institutions have obvious effects on utilization. In addition, patients also affect resource use, and a seldom-discussed implication is that *patients* also have obligations to promote quality population care. This is why, for example, patients are not ethically justified in demanding that health systems “do everything” to facilitate their individual health care preferences.

IV.4.e. A definition of health care quality

As discussed above, physicians and health care organizations have obligations to ensure quality care at the patient level. With a population-level understanding, these entities as well as patients have additional responsibilities to use resources fairly. With this background, we can propose a definition of health care quality that is both patient-centered and accounts for the needs of the population:

Health care quality is the degree to which physicians and supporting organizations fulfill their care obligations to individual patients, and the degree to which patients, physicians, and supporting organizations enable these obligations to be fulfilled justly across the population.

IV.4.f. Quality-related obligations

Quality can then be defined more specifically by describing the obligations that physicians, health care organizations, and individuals have to patients and the population.⁶⁵ While we list major obligations below, patient advocacy groups, healthcare institutions, and physician specialty groups could use this general framework to develop more specific lists of care obligations tailored to particular clinical settings or diseases.

- *Quality patient-level health care by the physician* is the physician’s best reasonable effort, consistent with current professional knowledge, to: (1) Be accessible for timely patient encounters or arrange appropriate coverage, (2) accurately identify a patient’s goals within a trusting, compassionate, and communicative clinical relationship, (3) guide or help shape these goals in a beneficent manner that is respectful of patient autonomy, (4) determine how to achieve goals in a manner that maximizes benefit and minimizes risk, (5) initiate and skillfully carry through processes of care that enable achievement of goals, (6) measure the effects of care processes to enable an iterative reevaluation of the goals of care, (7) advocate for or provide adequate resources to maximize the patient’s access to existing services, (8)

facilitate coordination and continuity of care for the patient among appropriate healthcare providers, and (9) advocate for improving existing services or implementing new ones to enable achievement of goals.

- *Quality patient-level care by health care organizations* is the degree to which these entities, to the best of their abilities: (1) advocate for or provide adequate resources to maximize the patient's access to existing services, (2) facilitate coordination and continuity of care for the patient among appropriate healthcare providers, and (3) advocate for improving existing services or implementing new ones to enable individual practitioners to carry out their duties to individual patients..
- *Quality population-level health care by patients, physicians, or health care institutions* is their best reasonable effort to: (1) facilitate or participate in ethical healthcare interventions enabling equitable, efficient, or greater distribution of health or healthcare resources, (2) Facilitate or participate in fair deliberation processes enabling equitable, efficient, or greater distribution of health or healthcare resources, (3) Facilitate or participate in monitoring physician and healthcare institution quality.

We discuss implications of this understanding of health care quality in section 5, “A framework for evaluating the ethics and effectiveness of pay-for-performance systems.”

IV.5. Key ethical principles in physician compensation reform

Beauchamp and Childress describe four key principles that must be balanced and promoted within medical care and research: nonmaleficence, beneficence, justice, and autonomy.⁶⁶ While this is only one framework and set of principles among many, it is a useful approach for examining policy reforms with the potential to affect the health of individuals and society. Here we review the application of these principles to pay-for-performance.

Nonmaleficence refers to the duty not to harm individuals or populations. As applied to compensation arrangements, this principle requires that a new policy is at least neutral in terms of harm. How “harm” is defined as well as weighing risks and benefits of a new intervention obviously become key questions. Some forms of harm are obvious such as deterioration of health. However, if the health of most individuals improves but deteriorates in a minority, or if small levels of harm are detected but are associated with substantial cost savings, assessing harm becomes complicated. The question also arises: deterioration of health compared to what? The United States has wide variation in health and health insurance coverage and no accepted standards for health outcomes or access to care. In general, it seems reasonable to require that pay-for-performance should result in no deterioration of health compared to the status quo of the individual, especially among vulnerable populations.

Other types of harm are more difficult to quantify, such as the lost time and psychological stress placed on physicians by increased levels of paperwork or the need to practice defensive medicine. A more abstract but potentially more insidious form of harm would be changes in physicians' self-understanding as professionals. Physicians might begin to view themselves less as professionals with an overriding commitment to patient care and more as employed technicians aiming to reach benchmarks in order to secure bonus income. Patient trust might also be undermined if patients come to view physicians as motivated by profit-seeking rather than consideration of their best interests. Harm could also result, however, by maintaining the status quo—a system already known to deliver suboptimal care and to harm patients. The Ethics Committee recommends careful attention to all these types of harm even if some might not be easily measured.

Beneficence refers to the duty to promote the good of an individual or population. Pay-for-performance is proposed as a beneficent system that will improve the health of individuals and populations, provide physicians with fair compensation and improved job satisfaction, and ensure that payers receive value for resources spent

on health care. Other benefits might be more difficult to assess, but, for example, physicians might feel greater satisfaction if they knew their good work was being rewarded, or patients might be reassured by the knowledge that they are being treated at a facility that is held accountable for its performance.

Autonomy refers to the concept that individuals should be self-directed, and, within certain limits, should be free to choose the direction of their lives. In the pay-for-performance debate this principle is most relevant to the decisions made by patients and physicians. Patients should remain free to choose or defer a desired intervention and physicians should be able to exercise their judgment in treating patients as they see appropriate. Autonomy could also apply to payers in that they should be able to choose a method of physician compensation that they judge to be fair. Limits to autonomy must also be considered. Autonomous decisions by patients might, in fact, severely harm their health or might lead to unjust expenses if patients demand and receive inappropriate care (such as an MRI for a transient tension headache). And while physicians should remain autonomous in acting in the best interests of their patients, there must also be some limit at which the expense of tests or interventions for a given patient becomes unjust because of short-term resource limitations. Autonomy for insurers in deciding on compensation systems may be limited by evidence of harm from such a system.

In medical ethics, the principle of justice generally refers to issues of distributive justice. Commitment to the notion of the equal inherent dignity of each person implies a commitment to distribute fundamental goods such as rights, the necessities of life, and health care in a fair manner. As applied to physician compensation systems, questions of justice could take several forms. Compensation systems should result in fair distribution of health care to patients, an essential precondition for population-level health care quality as discussed above. According to Rawls⁶⁷ and those who apply a Rawlsian analysis to health care,⁶⁸ a change in policy will only be just if it improves the condition of those who are currently least well-off with respect to access to health care services (the “difference principle”). As applied to physicians, justice could imply that physicians who perform better or expend more effort should receive higher compensation than others, i.e. merit might be an appropriate material principle of justice. On a broader scale, because pay-for-performance requires financial capital to improve systems and processes, justice would require that practices or individual physicians not be constrained by their current financial status or the wealth of the populations they serve in improving their performance.

IV.6. Assumptions and limitations of professionalism-centered quality improvement

Professionalism has traditionally been regarded as the primary driver of quality medical care⁶⁹ and its place in the pay-for-performance debate deserves in-depth discussion. Professionalism has been defined as commitment to the skills, competence, and character expected of a member of a highly trained profession.⁷⁰ Professionals subordinate their own interests to the interests of others⁷¹ and adhere to high ethical and moral standards.⁷⁰ This includes core humanistic values such as honesty and integrity, caring and compassion, altruism, empathy, respect for others, and trustworthiness.⁷⁰ Members of the medical profession commit to improving the health of their patients with state-of-the-art care as well as to continuously updating their knowledge in both an individual and collective sense.⁶⁹ Professionalism further entails exercising self-accountability and demonstrating a continuing commitment to excellence.⁶⁹

Proponents of professionalism-centered quality improvement believe the above commitments will provide sufficient motivation for excellent patient care and improvement. Underlying this philosophy are the assumptions that most physicians have inherent integrity and are motivated to do good, achieve high quality, and improve their skills. Improving quality requires system change, so that a professionalism-centered approach also presumes that individual physicians will be motivated to collectively advocate for broader changes. For example, if physicians in a group practice felt that an electronic medical record would improve

quality, professionalism would motivate finding some way to pay the extra costs and committing time to training.

A professionalism-centered approach has limits. Not all physicians will act professionally. Further, even if individual professionalism is strong, this may not translate into collective professionalism to improve complex systems of care. For example, it seems apparent that contemporary physicians' collective sense of professionalism has not been sufficient to redress widespread geographic variations in practice, substantial health disparities, and the suboptimal quality identified by the Institute of Medicine.

IV.7. Assumptions and limitations of performance-centered quality improvement

The fundamental principle of pay-for-performance is that better performance by physicians or physician groups should be financially rewarded; or conversely, that worse performance should be penalized. This presumes that there are physicians or physician groups with a greater commitment to quality care, physicians with greater intellectual knowledge and skills, and those who work harder or more efficiently. It presumes that such knowledgeable, industrious, and efficient physicians or groups will improve patient health through the exercise of these qualities. Performance-based improvement initiatives further assume that financial incentives motivate individuals and organizations to change behavior. They are based upon a material principle of justice as merit – that those who demonstrate knowledge, efficiency, and effectiveness deserve to be rewarded. They may also presume that clinical problems always have clear and evidence-based solutions; i.e., that there is often a “right” answer and that adherence to this mode of action can be measured. If pay-for-performance truly aims to measure quality care, it must also presume that all entities responsible for quality care can and should be measured, not simply those that are easily measurable. It presumes that this can be translated into fair compensation.

Limitations of this approach include that it cannot account for the uncertainty inherent in many diagnoses and clinical decisions and it may de-emphasize professionalism by making financial incentives overt. If professionalism calls physicians to a higher moral standard and demands at least limited altruism, physicians may feel demeaned not only by the underlying assumption that they provide suboptimal care, but also by the presumption that only money can sway them to improve. Pay-for-performance advocates might suggest that a strong commitment to professionalism could mitigate many of its potential unintended consequences, resulting in financial incentives only for those who improve care. But from the perspective of pay-for-performance, this is internally contradictory. If one assumes that professionalism cannot motivate and only profit can, it cannot be simultaneously argued that professionalism must keep the drive for profit in check. On this view, the only option for mitigating abuses would be to restrain the profit motive by decreasing financial incentives. Yet this is a complex empirical challenge: to prevent gaming, incentives cannot be set too high, yet small incentives are unlikely to be effective.

Cultivating professionalism is therefore essential in creating compensation systems that truly enhance quality. For example, if pay-for-performance arrangements turn out to be unfair, professionalism would require that physicians continue to provide their highest standard of care. Indeed, physicians in many countries face compensation situations far inferior to the current US system and are expected to act professionally. Nevertheless, systems do vary in the degree of temptation they present to deviate from accepted professional norms. For example, physicians who feel extreme time pressure during patient encounters might be more likely to act unethically compared with those who feel they will be fairly compensated for spending adequate time with patients. It is fair to judge one system against another by contemplating the degree to which it may enhance or erode professionalism. While physicians should maintain their overriding obligation to act

professionally and SGIM should promote this, effects on professionalism should always be considered in designing compensation systems.

Finally, it is apparent that quality improvement motivated by performance measurement and by professionalism are not mutually exclusive. Advocates of performance-based systems are unlikely to deny that professionalism is valuable, but they may regard it as insufficient to achieve goals of a high quality health care system. Advocates of professionalism may feel that some financial incentives may be appropriate if developed carefully, but should not be regarded as the primary driver of quality physician care.

IV.8. The ethics of social experimentation and quality improvement initiatives

The expansion of pay-for-performance without rigorous evidence of efficacy has been compared to the diffusion of surgical or medical interventions later found to be ineffective or harmful⁷² such as radical mastectomy for early-stage breast cancer^{73, 74} and hormone-replacement therapy for postmenopausal women.⁷⁵ This raises the question of how policy reforms with uncertain efficacy should be evaluated and implemented. Scant literature has addressed this question directly. Commentators have recommended a joint scientific and deliberative approach to evaluating public health and health care interventions⁷⁶ as well as a process of ethical review, timely empirical research, and ongoing monitoring.²⁴ From the perspective of patients, evaluation and monitoring of the policy could examine health effects, access, and income spent on health care, and compare these outcomes to case-mix adjustable standards. Value for money spent on the intervention should be considered.

Insights regarding the ethics of institutional quality improvement programs are also informative. Casarett and colleagues⁷⁷ proposed two criteria for determining whether quality improvement initiatives should be reviewed as research: (1) the majority of patients involved are not expected to benefit directly from the knowledge to be gained or (2) if additional risks or burdens are imposed to make the results generalizable. Perneger has argued that any novel intervention that does not *directly* benefit patient health must be monitored, and may even require some level of informed consent.⁷⁸ Others have claimed that the level of excess risk imposed by an intervention is of primary importance in determining whether it qualifies as research.⁷⁹⁻⁸² Experts convened by the Hastings Center generally applied the ethical requirements of clinical trials⁸³ to quality improvement interventions but concluded that the latter are usually not human subjects research and should not undergo review by an institutional review board.⁸² Instead, appropriately calibrated supervision should be integrated into professional supervision of clinical practice. Despite these differences in emphasis, authors are nearly unanimous in calling for oversight of risky interventions not meant to directly benefit individuals. This has included calls for monitoring of quality improvement interventions,^{77-82, 84} innovative surgical techniques,⁸⁵⁻⁹¹ and public health assessments.⁹²

Although pay-for-performance is intended to improve patient care, some would argue that it is primarily a cost control measure with unclear effectiveness and a substantial risk-benefit ratio for certain populations.¹⁶ In addition, many quality measures are designed to improve overall population health (e.g., vaccinations) and not to address the health needs or preferences of individual patients. Combined with its lack of informed consent, a reasonable case could be made that pay-for-performance as currently structured is an unethical form of “social experimentation.”^{72, 93} The Ethics Committee recommends taking the experimental nature of this reform seriously. After weighing the potential risks and benefits of performance-based physician compensation, we will examine the ethical obligations that the experimental nature of this reform engenders.

V. A framework for evaluating the ethics and effectiveness of pay-for-performance systems

The Ethics Committee's framework for assessing the ethics and effectiveness of pay-for-performance arrangements is shown in Figure 1. The framework presumes that for a policy change to be ethical, it must be based on fundamentally ethical and valid precepts; must result in tangible benefits and minimal harms for all stakeholders; may require provisions to study health care quality, value, and equity; and may require structured monitoring to detect and mitigate unintended consequences. The framework therefore includes key questions to be answered when assessing pay-for-performance from an ethical perspective. Below we explore each question in depth then make policy recommendations based on this analysis.

V.1. Are the fundamental and guiding principles of pay-for-performance valid and ethical?

In examining ethical issues in pay-for-performance, it is useful and necessary to distinguish its fundamental precepts from its potential effects when implemented within the actual health care system. Having fundamentally ethical precepts is necessary but not sufficient for determining if a compensation system is ethical. Capitation, for example, was judged by some observers to be inherently unethical.⁴⁷ While others would argue the ethical merits of capitation, it is clear that our "social experiment" with full capitation has largely been abandoned as it proved intolerable to patients and physicians.

We explored the fundamental principles of pay-for-performance above in section IV.6. These include rewarding quality health care and aligning physicians' financial incentives with the best interests of patients.⁶ Although this inherent appeal to physician self-interest might be in tension with professional ideals of altruism and beneficence,^{66, 69-71} a partly merit-based system of physician compensation is not inherently unethical. To see this, consider the example of a careless physician who engages in cursory patient encounters to maximize income, makes no effort to update clinical knowledge, and thus has patients with poor outcomes. It seems apparent that it is *unjust* to provide this physician the same compensation as one whose patients are healthier because he or she develops systems to improve quality and access while updating clinical skills and knowledge-base regularly. Furthermore, if physicians' financial incentives and the best interests of patients are aligned across the spectrum of care in pay-for-performance, many of the concerns raised by capitation systems are not relevant. Incentive programs aligned with comprehensive, measurable, and evidence-based physician and patient goals could be ethical.

Although the fundamental principles of pay-for-performance are ethical, the understanding of quality that guides current approaches is not valid. In contrast to our patient-centered definition above, pay-for-performance typically equates quality with the achievement of non-individualized, pre-determined health goals for broad populations and fails to consider contributions from stakeholders other than physician entities⁴⁸ (such as health plans) that also have partial responsibility for ensuring quality. Because they are based on inadequate definitions, existing pay-for-performance measures lack validity and comprehensiveness in assessing health care quality. Measures typically cover only isolated and readily quantifiable aspects of physician clinical performance and fail to assess crucial realms such as judgment, compassion, and communication skills.

For example, some systems require that greater than 65% of diabetic patients reach systolic blood pressures under 140. Commentators have raised concerns that this "one-size-fits-all" approach might be motivated by expediency or financial priorities.⁹⁴ We note another ethical shortcoming. For performance targets to be truly "population" goals (rather than those of a few experts), doctors and population members would have to collectively endorse them using fair processes.^{95, 96} Diabetic patients themselves might prioritize the goals of their care differently. For example, they might choose a different blood pressure goal, or put greater emphasis on foot exams than blood pressure. In reality, policy-makers, executives, and scientists choose population-level

goals and thus impose obligations in a manner that might infringe on patient and physician autonomy. Without fair deliberation, such goals, however wise, cannot claim legitimacy.

This external and even “forced” population-level approach implies, at best, improved health and reduced costs for patients whose goals match those of policy-makers. At worst, physicians could overlook urgent patient goals, provide inappropriate care, and increase costs via excess testing.⁹⁷ Unmeasured domains of quality, such as communication, compassion, and trust could deteriorate as clinicians divert attention to limited sets of performance targets.

Even if population goals were decided in a manner fair to physicians, most current pay-for-performance systems would still be flawed. Today’s arrangements primarily assign responsibility for quality improvement to individual physicians, physician groups, or hospitals.⁴⁸ Truly valid measurement must include input from and evaluation of *all* stakeholders responsible for ensuring quality, not merely physicians.

Current pay-for-performance arrangements can therefore be understood as holding a single class of stakeholders (physician entities) accountable for a small set of population-centered goals chosen in a top-down manner.

The area of greatest uncertainty in pay-for-performance implementation is the presumption that quality can be adequately measured across a wide range of clinical conditions. However, we consider this an empirical question amenable to research rather than a fundamental conceptual or ethical flaw in pay-for-performance. At the same time, it should be noted that the need to perform such research on pay-for-performance arrangements has its own ethical implications. Proper investigation will entail sizeable financial expenditures that theoretically could be allocated to other ethical goods. We discuss these implications in the section V.3 regarding the ethics of pay-for-performance implementation.

V.2. Can pay-for-performance result in benefits for stakeholders?

In answering this question, let us assume that a pay-for-performance system can be implemented under ideal conditions and that all objections regarding the feasibility of implementation and measurement have been met. What would such a system look like?

Key prerequisites needed to create ethical pay-for-performance systems and subsequent benefits are shown in Figure 2. The most essential provision would be the use of valid and comprehensive performance measures. Such measures would accurately assess every relevant aspect of patient care provided by a physician (or be highly robust proxies for comprehensive assessment) while causing minimal administrative burden. In this case they would essentially operate in the background for a physician providing appropriate care. Such measures would need to account for multiple subtleties: refractory patients in whom the measured therapy does not help; clinical scenarios in which the patient and physician do not feel that the measure applies; care shared among multiple physicians;⁹⁸ difficult to measure aspects of quality care such as physician judgment, good listening skills, diagnostic ability, empathy, access, continuity, and care coordination; and case-mix differences among physicians or practices. Rewards in such an ideal system would be commensurate with patient complexity, physician effort, and quality of care.

From the perspective of justice, prerequisites of ethical pay-for-performance systems would include features that reduced health disparities, such as rewards for reducing disparities and/or providing supplemental support for the care of vulnerable populations. Properly developed systems would make caring for such patients financially feasible or even advantageous and could improve the health of minority patients, the poor, and those with low health literacy. Specific stipulations could include the rewarding of improvement in addition to

absolute achievement, allowing physicians in low-performing practices to improve incrementally towards ideal quality. In addition, performance systems that benefited patients and physicians would have provisions to ensure that less well-off physicians or physician groups did not start at a disadvantage simply because of their financial status or because they serve lower income or more vulnerable populations. Provisions to improve equity could include grants to such low-income practices to hire support staff, enhance information technology, or improve other infrastructure. These would promote quality improvement among patient populations most likely to need it.

Pay-for-performance arrangements could also be beneficial if payers encourage patients to identify a primary care provider. This could increase preventive care and the treatment of chronic diseases. A realized benefit of pay-for-performance has been a general increase in attention to the quality of health care. This could have downstream effects such as increasing attention to disparities in health and health care.

In an ideal pay-for-performance system, physicians would have sufficient resources to spend appropriate time with patients, make decisions in their patients' best interests, determine and implement evidence-based treatments when indicated, and ensure appropriate follow-up. Physicians would be motivated to improve their clinical skills because ultimately this would both improve patient outcomes and increase compensation. At the system level, practices would invest in technology and personnel that improved quality. With an appropriate guiding definition of quality, measures and incentives would generate systems that improved equity and efficiency. Patients' health outcomes and satisfaction would benefit and disparities in care could be reduced. In such an ideal system, job satisfaction and professionalism among physicians would likely improve. Payers would receive good value for resources spent on health care.

V.3. Can pay-for-performance lead to detrimental effects on stakeholders?

While useful to explore, most of the prerequisites described above have not been achieved. The Ethics Committee is therefore concerned that harmful unintended consequences of pay-for-performance might be at least as likely, if not more likely, than the intended benefits.⁹⁹ The greatest risk for harm to patients and physicians seems to be through the use of performance measures that, while unassailably good in the abstract, give an incomplete or even misleading picture of global quality (Figure 3). Such measures could create conflicts of interest between concern for personal profit and the provision of optimal patient care. For example, it seems reasonable to require that diabetic patients achieve hemoglobin A₁C levels below 7.0. However, in patients with previous hypoglycemic episodes this target might in fact be dangerous. Or, consider a patient with a hemoglobin A₁C of 7.5 who frequently skips preventive visits but happens to present with back pain. If bonuses are provided for reducing blood glucose levels, the physician may prefer to discuss diabetes control rather than performing a detailed assessment to rule out life-threatening causes of back pain. In such scenarios, the state of physicians' professionalism becomes a key variable in determining subsequent effects. If physicians maintain a strong sense of professionalism, they will provide optimal care despite knowing that some patients may be lowering their chance of receiving bonus payments. While patient care would not suffer directly if physicians acted altruistically and professionally, they nonetheless could grow frustrated and less satisfied. Among physicians without a strong commitment to professionalism (or if pay-for-performance erodes professionalism), inappropriate care may ensue in the form of "treating the measure" rather than the patient. In other situations, even egregiously immoral gaming could occur. For example, physicians could inaccurately record blood pressures to meet benchmarks.

An incomplete set of measures may even lead physicians with strong professionalism to provide inappropriate care if the emphasis placed on certain measures causes physicians to mistake these domains for appropriate care in situations in which they are not. This could also occur "subconsciously" among physicians who have a

genuine knowledge of evidence-based care. But whether intentional or unintentional, all diversion from appropriate treatment would reduce individualized care, decrease patient autonomy, and potentially erode the trust of patients in their physicians.

In cases where it is in fact appropriate to address a measured entity such as diabetes control, some patients will be refractory to treatment. This could lead, through practices such as “skimming” and “dumping,” to adverse selection effects for patients who have the greatest need for the best physicians. Physicians might view such patients as obstacles to bonuses. These feelings could contribute to the deterioration of the doctor-patient relationship. Likewise, poorly designed measures could lead physicians to refuse to accept or terminate clinical relationships with refractory, complicated, noncompliant, or low-income patients because these individuals may be less likely to achieve standards required to achieve bonuses. Today’s trend toward increased patient cost-sharing may exacerbate this risk; patients with lower incomes may be less likely to adhere to treatment recommendations if they cannot afford medications or visit fees.

Performance-based compensation may put physicians working in minority and other vulnerable communities at particular disadvantage; they are likely to serve a higher proportion of uninsured or underinsured patients leading to lower reimbursement and less revenue to invest in improvement systems. This could lead to a vicious cycle in which well-off practices receive larger shares of bonus payments than less well-off practices, ultimately decreasing the compensation and job satisfaction of physicians in less well-off practices and discouraging others from joining. Without detailed case-mix adjustment, physicians at these practices would also be likely to achieve lower scores in public rankings, receive fewer paying patients, and generate less income.

A growing gap between “rich” and “poor” practices could result, to the detriment of the poor as well as the physicians who serve them. Vulnerable patients might be served at increasingly strained facilities and care could suffer. Already recognized disparities in care might increase and the gap in quality and outcomes between vulnerable patients and those cared for at well-off practices might grow even greater.¹⁰⁰ Inadequate quality measures do not merely pose a threat to fair remuneration for physicians under pay-for-performance. The gravest moral outcome of such measures would be a detrimental effect on access to care and health outcomes among minorities and other vulnerable populations.

Pay for performance is also likely to increase the complexity of the reimbursement system, and its metrics might be used against physicians for legal, credentialing, or recertification purposes. Such changes might well decrease job satisfaction and autonomy among physicians. Ultimately this would also have detrimental effects on patient care and the attractiveness of medicine (especially primary care) as a profession. The latter is an important point deserving special emphasis. Given the global nature of their activities, primary care physicians are likely to have the greatest portfolio of quality measures for which they are responsible. This burden may well provide additional incentives to narrowly specialize; the more limited set of quality parameters in subspecialties might permit easier achievement of performance and attainment of bonuses.

There is further concern that even if anything approaching truly valid and comprehensive measurement is achievable, it might require overly invasive or burdensome systems. The expense of such systems could make the marginal value of performance-based compensation negligible. Deteriorating value could also result if physicians drive up expenses by ordering unnecessary tests or referrals to specialists.⁹⁷

All of the drawbacks above could have detrimental effects on public health and patient and physician satisfaction. Insurers could once again face a backlash by physicians and patients against an effort that might come to be viewed cynically as another attempt at cost-containment, offered disingenuously as a program to improve the quality of health care.

V.4. Can detrimental effects be satisfactorily minimized?

Based on previous research and our analysis, both benefits and detrimental effects from pay-for-performance seem plausible. Therefore, for systems to be ethical, the key question becomes whether benefits will be large enough and whether unintended consequences can be minimized to an acceptable degree. This tradeoff is difficult to predict *a priori* and will require dedicated research. Several potential adverse effects seem amenable to relatively straightforward interventions such as preferentially rewarding practices serving lower-income and higher morbidity patients.

The key obstacle to ethical pay-for-performance appears to be implementing measures that are valid and comprehensive, while remaining practical and cost-effective. Rigorous research is needed both to develop such measures and determine if they are fair and effective. Given the importance of measurement, section VII.3. below lists essential characteristics that quality measures must have in order to minimize unintended consequences:

Unintended consequences could also be minimized with strategies to address other deficiencies of pay-for-performance. Some will be short-term fixes to patch blatant deficiencies while others are long-term solutions to approaching truly valid measurement and may require years or even decades of research. For instance, rigorously validated qualitative techniques such as in-depth patient interviews and structured chart review may be superior in accurately assessing physician quality. Measures of patient-centered care such as the Consumer Assessment of Healthcare Providers and Systems¹⁰¹ survey might be employed or refined for use in pay-for-performance systems. Other types of incentives besides financial ones could be provided to physicians and patients. Patient report cards displaying progress toward goals could be an incentive that might also improve patient education. An electronic medical record could be a type of physician “peer-pressure” incentive that could help improve quality. Alternatively, physicians could receive bonuses to participate in systems shown to improve care such as an electronic medical record that has automated quality reporting capabilities. Short-term incentives could change structures and habits without leading to long-term focus on particular outcomes to the detriment of other care. Rotating or cumulative incentives could be used to make measurement of quality more comprehensive. Under current arrangements, convenient methods of documenting or measuring exemptions to compliance would be necessary and valuable, especially if health outcomes measures are used. Use of process measures for complex or noncompliant patients would reduce the temptation for physicians to drop such patients or use gaming strategies. Actual bonus dollars could be spent not only on raising physician incomes, but also on improving systems for patients whose health insurance providers do not provide performance-based bonuses.

Of course, these ideas also represent untested modalities that should be selectively evaluated in the context of rigorous research.

V.5. Are systems in place to monitor and improve pay-for-performance programs?

As described above, a substantial literature advocates structured oversight of any risky intervention not meant to directly benefit individuals.^{77-82, 84-92} Although pay-for-performance is intended to improve patient care, some would argue that it is primarily a population-centered cost control measure with unclear effectiveness and, for certain populations, a high ratio of risk to benefit.¹⁶ We believe the risks from pay-for-performance outlined above are serious enough and have a high enough probability of occurring to engender an ethical obligation for structured monitoring of key outcomes.

Even if research suggests that unintended consequences can be minimized to a satisfactory degree, ethical implementation still requires regular monitoring of key outcomes. For patients, health measures, satisfaction with care, coordination, continuity, and equitable access to care should be assessed. Any demonstration of deteriorating access or health particularly among vulnerable populations would necessitate restructuring the system. Among physicians, job satisfaction, administrative burden, and fairness of compensation should be evaluated. Value for care and payer satisfaction with pay-for-performance systems should be determined. Implementing such objective evaluations suggests a need for standardized measures of pay-for-performance itself.²⁴

V.6. Has the method of implementing pay-for-performance been ethical?

As we have noted, studies of performance-based physician compensation have generally shown scant evidence of quality improvement.¹⁷⁻²² Implementation without proof of safety and effectiveness is ethically problematic. It is unclear, for instance, why a new drug to be used by several dozen individuals requires proof of safety and efficacy, while policy changes affecting millions do not. From an ethical perspective, pay-for-performance is a potentially risky experiment in health care delivery.²⁴ At minimum, reflection on the risks of performance-based physician compensation should lead to incorporation of design features to minimize potential unethical outcomes (discussed below under section VII., “Policy Recommendations”). Preferably, policy makers should complete carefully structured small-scale pilot tests before widespread implementation. Even if better evidence of safety and efficacy existed, ethical implementation would require some form of structured monitoring (section V.5) because the population-centered nature of current pay-for-performance programs could obscure serious instances of harm to individuals.

The need for research raises another potential detrimental effect of implementing changes in health care financing without solid evidence. “Post-marketing” studies might eventually determine that fair measurement is not possible, that adverse consequences are intolerable, or that the marginal benefit of pay-for-performance is not worth the cost. The result would then be that a massive financial investment had been undertaken in both implementing pay-for-performance systems and in this later research, only to demonstrate that it was an untenable approach. Such “wasting” of resources represents a potentially serious moral outcome given that the expenditures could have been allocated to other societal goods.

A further concern with the current implementation approach is that just as inadequate measures could lead to adverse unintended consequences, so the inability to measure important outcomes such as effects on professionalism and patient trust will make it difficult to establish negative effects *post-hoc*. If such important harms cannot be adequately measured, a failure to demonstrate harmful effects of pay-for-performance may merely reflect the insensitivity of the measurement techniques rather than a true lack of adverse outcomes.

Despite these caveats, the Ethics Committee believes that for now, investment in pay-for-performance research (especially to determine key outcomes and methods of constructing ethical systems) is worthwhile. We explore strategies for safeguarding current pay-for-performance systems and moving toward valid “pay-for-quality” systems that encourage genuine quality in section VII., Policy Recommendations, below.

VI. Summary of potential ethical problems in the implementation of pay-for-performance

Table 2 lists the major potential ethical problems in the implementation of pay-for-performance systems based on our exploration of its fundamental and guiding principles, our definition of health care quality, and our framework for assessing the ethics of performance-based physician compensation.

VII. Policy Recommendations

SGIM supports evidence-based, ethical, and comprehensive efforts to improve health care quality and physician compensation. While carefully designed pay-for-performance systems could be a component of such an approach, current iterations fail to reach acceptable ethical standards for the reasons stated above. Given these concerns, calling for a moratorium on pay-for-performance until proven safe and effective is a consideration. However, the Ethics Committee recognizes that implementation is already widespread and that calls for a moratorium now may have a minimal policy impact. We therefore advocate the following four major strategies to transition from risky pay-for-performance to high quality health care and ethical performance-based physician compensation (Table 3).

VII.1. Current pay-for-performance systems should rapidly adopt safeguards to protect vulnerable populations (Table 4)

Until researchers develop valid and comprehensive quality measures, pay-for-performance systems must prioritize the protection of vulnerable populations and minimize readily anticipated adverse consequences. Pay-for-performance leaders should institute the following safeguards to achieve these aims:

VII.1.a. Balance current population-level measurements with the best available measures of quality from the patient perspective.

The non-patient-centered nature of current pay-for-performance systems could be partially remedied by appropriate measures. For example, the Consumer Assessment of Healthcare Providers¹⁰¹ places a strong emphasis on measuring how well health care providers communicate with patients. A growing body of research^{102, 103} could inform the development of valid measures in the outpatient setting.

VII.1.b. Reduce or stabilize the percentage of physicians' salaries at stake.

Policy makers should limit bonus amounts to reduce temptations to "game" the system, especially in arrangements that do not adjust for case-mix. Current levels of approximately 5% of physicians' salaries seem reasonable in systems that adjust for case mix, while lower levels would be appropriate for those that do not.

VII.1.c. Provide adequate off-setting compensation to physicians serving vulnerable patients.

For example, the 2006 Massachusetts health care reform legislation included provisions to base Medicaid hospital rate increases on quality improvement, including the reduction of health care disparities.¹⁰⁴ If such provisions are designed meticulously and fairly,¹⁰⁵ financial incentives could encourage and reward physicians for serving patients with low levels of expendable income, complex medical conditions, non-adherence to recommended treatments, or limited health literacy.

VII.1.d. Recommendations regarding population-level measures.

Population-level measures of quality must be instituted carefully because they are inherently non-patient-centered. Because such measures are pervasive in modern pay-for-performance systems, we recommend several strategies to maximize the protection of vulnerable patients:

VII.1.d.i. Utilize population-level measures that are evidence-based and clearly linked to valued patient outcomes.

For example, pneumonia and influenza immunizations have been proven to prevent potentially debilitating illnesses while having minimal adverse effects. Other commonly utilized measures may fail to reach these standards; hemoglobin A1C targets are based on evidence from randomized control trials but the applicability to individual patients on real-life physician panels is often unclear.^{106, 107}

VII.1.d.ii. Population-level measures should assess domains clearly within the influence of the physician or physician group, especially for complex patients.

Basic process measures such as vaccination rates and the frequency of diabetic eye exams are imperfect measures of quality but are more within the influence of physicians and practice groups than outcomes measures. Such measures seem less likely than outcomes measures to cause avoidance of vulnerable patients and physician frustration.

VII.1.d.iii. Measures should assess quality at the level of large physician practices rather than individual physicians.

Experts skilled at risk adjustment should determine minimum patient population sizes for each measure to provide optimal data and avoid statistical error. Only practice groups with sufficient numbers of patients should initially be measured.

VII.1.d.iv. Measures should assess improvement toward goals in addition to achievement of cut-points.

This could apply to both process and outcomes measures. For example, physician groups could be rewarded both for achieving vaccination rates at a pre-determined level as well as for annual improvements toward the target.

VII.1.e. Recommendations regarding population-level outcomes measures.

Population-level *outcomes* measures are methodologically complex and the validity of current measures is uncertain. This would likely preclude their use in an ethically defensible manner in the short-term unless provisions that maximize validity are closely followed, including:

VII.1.e.i. Explicitly assess patient complexity and vulnerability.

This would require integrating patient survey data and medical record data regarding sociodemographic characteristics and medical comorbidities.

VII.1.e.ii. Carefully adjust for case-mix based on relevant patient factors.

For example, it would be inappropriate to reduce systolic blood pressure levels below 140 in an 85 year old diabetic patient with multiple co-morbidities taking three antihypertensive medications. Proper case-mix adjustment might allow this patient's physician to prioritize other care, while a lack of adjustment could induce either dangerous efforts to lower blood pressure or substantial physician frustration.

VII.1.e.iii. Carefully adjust for the manner in which responsibility for patient outcomes is shared between physicians, patients, health plans, and other health care institutions.

For example, consider two physicians who must eventually prescribe three hypoglycemic medications to similar diabetic patients whose initial hemoglobin A1C levels were 9.5. The first patient has generous health insurance, enabling him to purchase all three medications and lower his hemoglobin A1C to 6.5. The second patient must pay the full cost of medications and she can only afford two. She only lowers her hemoglobin A1C to 7.5. A proper system would adjust for health insurance status.

VII.1.f. Pay-for-performance leaders should initiate monitoring before and after implementing the above changes.

Monitoring should assess important patient outcomes not often included in pay-for performance studies, such as satisfaction, access, continuity, and coordination of care. Effects on vulnerable patients should be a particularly important focus. Studies should also assess physician satisfaction and professionalism, administrative burden, effects on the patient-physician relationship, and the impact on disparities between physician practices serving more vulnerable and less vulnerable populations. Monitoring should examine payer satisfaction and value for health care expenditures.

VII.2. Key stakeholders should develop consensus regarding their responsibilities in improving health care quality

A crucial first step in achieving ethically defensible health care quality improvement will be for key stakeholders to develop consensus regarding their shared and unique obligations to the individual patients and patient populations.⁶⁵ For example, to improve blood glucose control among diabetic patients, physicians must recommend evidence-based, patient-centered management strategies, practice groups must provide access to testing facilities, health insurers must facilitate receipt of affordable medications and testing, and patients must adhere to therapeutic plans.

Bringing health insurers, patients, employers, and physicians to the table would highlight opportunities to improve coordination and continuity of care; new paradigms for quality improvement that integrate assessment at the individual physician level and institution level could emerge. Only by delineating such responsibilities will stakeholders be able to create accountability and develop a long-term approach.

Table 5 lists examples of shared and unique obligations that could form the basis of a valid quality measurement system.⁶⁵

VII.3. Researchers and policy makers should develop valid and comprehensive quality measures for use in the next generation of compensation systems that reward genuine quality

A long-term strategy for quality improvement will be guided by a framework of accountability in which physicians, practice groups, health plans, and public payers are measured based on how well they fulfill well-defined obligations to individual patients and populations. Measures should have the following essential characteristics:

VII.3.a. Valid.

The measure must accurately assess genuine “quality” in a given clinical dimension. A “gold standard” describing stakeholders’ duties for quality care is thus an essential precondition to developing valid measures. For example, measures of *physician* quality should assess multiple domains such as accessibility, adherence to

evidence-based but patient-centered care, and communication skills. Appropriate measures would account for individualized patient-physician goals, be based on the best available evidence, and minimize administrative burden and expense.

Measures of *health care institution* quality (e.g., physician groups, hospitals, and public and private payers) should assess domains such as how well these groups foster teamwork, facilitate achievement of patient goals, strengthen the doctor-patient relationship, and improve access, coordination, and continuity of care for individual patients.

For example, quality diabetes care is often measured by assessing processes and outcomes related to control of glucose, blood pressure, and cholesterol (Table 1). However, it is unclear that reaching such goals over a given patient population always represents quality diabetic care. A physician may not push a patient to achieve lower hemoglobin A₁C levels for legitimate reasons (such as a history of recurrent hypoglycemic episodes) and may concentrate on other aspects of diabetic care. In this scenario, the physician may be judged to be providing low quality diabetic care when in fact it is evidence-based and high quality. Or, in a particularly difficult to control patient, a decline in hemoglobin A₁C from 10.0 to 9.0 might be a remarkable achievement and more validly represent high quality care than a decline from 7.3 to 6.9.

Equally important will be development of valid *population-level* health care quality measures. In addition to measuring how well physicians and health care institutions fulfill obligations to individual patients, comprehensive quality measures would assess the degree to which patients, physicians, and health care institutions maximize health care resources available to the population; facilitate their fair distribution;⁹³ and fulfill their obligations justly.

Validity is also improved by increasing sample size. In most cases, variations in individual patients are so great, the effect of case-mix so important, and the number of patients with a given target condition so small in any particular primary care practice that it will be extraordinarily difficult to distinguish signal from noise in assessing the quality of care of an individual practitioner. Measures of quality for large groups of physicians are likely to be more valid. Nonetheless, residual confounding by case-mix will persist even with larger groups and must always be taken into consideration.

VII.3.b. Designed to reduce health care disparities.

Valid measures of population-level quality would generate incentives for reducing health care disparities. Such measures would not simply provide offsetting compensation to physicians serving vulnerable populations (as per our short-term recommended safeguards, section VII.1.iii). New and sophisticated measures would reward parties generating equity and efficiency by assessing shared responsibility for care, available resource levels, and the inherent tension between patient-level and population-level healthcare perspectives.

VII.3.c. Achievable.

Valid measures would also set realistic and achievable goals for the individual patient. As above, population goals of quality cannot be considered truly valid unless some process has accounted for the goals of individual patients and physicians. In the absence of this, it is unclear for example whether commonly used measures of diabetic care are achievable by most patients outside a research setting where patients may have quite different characteristics from those included in rigorous studies.^{108, 109} In some cases this reality could imply that evidence of *improvement* as well as reaching a particular cutoff should be measured and rewarded.

VII.3.d. Comprehensive:

Measures must consider most aspects of patient care relevant to high quality or be rigorous proxies so that an overall assessment can be made. At the physician level, this would entail accounting for all nine physician care obligations listed above (section IV.4.f). For example, the comprehensive assessment of the care of diabetic patients includes more than low hemoglobin A₁C levels. Not only are low hemoglobin A₁C levels sometimes associated with adverse effects, comprehensive diabetes care involves many other dimensions such as goal assessment; education about complications, diet, and foot care; eye exams; monitoring for renal insufficiency; and potentially even psychiatric assessment. A diabetic patient might also have other co-morbid conditions that deserve attention and might be more pressing. The diabetic patient with back pain in the previous example may in fact wish to spend a large portion of his or her appointment discussing the pain and fears regarding cancer. The physician's discussion of these issues with the patient would represent appropriate and high quality care. However, if such discussions are not measured and valued, overall performance is not being assessed and the physician would be financially penalized for engaging in excellent care.

VII.3.e. Individualized.

Measures must have some ability to assess the combined goals of a given physician-patient interaction as well as longer term individualized goals. This suggests that both patients and physicians should have some choice in deciding what is measured.

VII.3.f. Developed and assessed by physicians.

Given the complexity of many clinical scenarios, measures must be developed with input and testing by physicians familiar with the targeted clinical settings or scenarios.

VII.3.g. Developed transparently and fairly.

Measures should be developed under strict principles of transparency. For example, all persons involved in creating new measures should, at minimum, be required to state potential conflicts of interest. In addition, fair processes such as deliberative democracy⁹⁶ (either to set population goals or allocate resources) would be *essential* to achieving population quality under any ethically defensible understanding of the term.

VII.3.h . Subject to assessment.

Measures should be evaluated for the essential characteristics above including validity, comprehensiveness, contribution to improving care, and their degree of promoting equity among patients and physician practices.

VII.3.i. Not overly intrusive, expensive, or onerous.

Entities measuring performance should take the lead in funding and developing systems to minimize the administrative burden and cost of measuring quality.

VII.4. Researchers and policy makers should use a cautious evaluative approach to long-term development of compensation systems that reward quality

After developing evidence-based measures of physician, health care institution, and population-level quality, policy makers should implement carefully planned, small-scale pilot programs that reward physician and health care institution quality. Benefits and adverse effects should be monitored. Those entities implementing innovations in payment and quality improvement should take the lead in funding these studies.

We base our suggestion to begin with pilot programs upon an ethical principle of precaution. However, efforts should be scaled up if benefits prove sufficient, health disparities are reduced, and adverse outcomes are minimized.

VIII. SGIM's role in promoting high quality health care and ethical performance-based physician compensation:

In considering the ethical shortcomings of pay-for-performance and the policy recommendations above, the Ethics Committee recommends the following role for SGIM in its mission to advocate for general internists, patients, and especially vulnerable populations (Table 8). In general, SGIM should maintain a proactive role in promoting high quality care and ethical physician compensation. SGIM should involve members and general internists in articulating the quality-related obligations that physicians and health care institutions have to patients and the population as well as developing valid measures of physician, health care institution, and population-level health care quality. SGIM should participate in designing evidence-based performance-based compensation systems, recommend studies and measures to evaluate the efficacy of pay-for-performance, and monitor effects on vulnerable populations and physicians. SGIM should continue to develop collaborative alliances with other key national organizations to ensure fair, valid, and comprehensive measures and to promote ethical compensation reform. Finally, SGIM should develop initiatives to promote professionalism as a primary driver of high quality care even under flawed compensation arrangements. Fulfilling these commitments could be facilitated by the creation of a permanent SGIM body to examine and monitor issues in quality of care and physician compensation.

IX. Conclusions

This paper explores the ethical dimensions of pay-for-performance within a framework that considers its fundamental and guiding precepts, its method of implementation, and its potential effects on patients and physicians. Major conclusions of the SGIM Ethics Committee regarding the ethics of pay-for-performance are displayed in Table 7.

Key principles of performance-based physician compensation include rewarding quality health care and aligning physicians' financial incentives with the best interests of patients. Although this inherent appeal to physician self-interest might be in tension with professional ideals of altruism and beneficence, the Ethics Committee does not consider these principles inherently unethical. However, as currently implemented, pay-for-performance is guided by a flawed understanding of health care quality that has generated inadequate quality measures and insufficient accountability for quality improvement. In addition, the process of pay-for-performance implementation itself has been highly questionable from an ethical perspective because of scant data supporting its safety and efficacy; significant potential for adverse effects on patients, vulnerable populations, physicians, and society; and a lack of structured monitoring of key outcomes. Because current pay-for-performance systems generally lack key safeguards to prevent adverse outcomes, the Ethics Committee is concerned that unintended consequences may be unfolding under pay-for-performance even now. Poorly

designed systems may be limiting access to care for vulnerable populations, eroding patient trust, and fostering breeches of professionalism.

Whether current pay-for-performance approaches can be ethical even after implementing safeguards is an open question requiring further research. Even with results from well-designed studies, judgments about the ethics of pay-for-performance will remain challenging. An optimal process for making such assessments would include weighing benefits and detrimental effects and giving preferential consideration to outcomes among vulnerable patients. Answering such questions in a more structured manner might involve comparing health outcomes and access-to-care under pay-for-performance systems to accepted risk-adjusted standards.

Despite significant flaws in current systems and uncertainty regarding the ultimate marginal value of even well-designed performance-based compensation, the Ethics Committee believes that investing in meticulously designed, small-scale pilot programs is worthwhile. Ideal arrangements could eventually improve patient care, narrow health disparities, and promote fair physician compensation while improving health care value. We recommend four major policy strategies for moving toward this goal. First, current pay-for-performance systems should rapidly adopt safeguards to protect vulnerable populations (Table 4). Second, key stakeholders should develop consensus regarding their responsibilities in improving health care quality (Table 5). Third, researchers and policy makers should develop valid and comprehensive quality measures for use in the next generation of compensation systems that reward genuine quality (Table 6). Finally, pay-for-performance leaders should use a cautious evaluative approach to long-term development of compensation systems that reward genuine quality. Until data from such evaluations are available, the SGIM Ethics Committee considers the widespread expansion of untested pay-for-performance systems to be ethically misguided because of potential dangers to key stakeholders.

X. Tables and figures

Table 1. Sample measures from the 26 item starter set recommended by the Performance Measurement Workgroup of the Ambulatory Care Alliance⁴⁹

Measured Entity	Measure
Breast Cancer Screening	Percentage of women who had a mammogram during the measurement year or year prior to the measurement year.
HbA ₁ C Management	Percentage of patients with diabetes with one or more A ₁ C test(s) conducted during the measurement year.
HbA ₁ C Management Control	Percentage of patients with diabetes with most recent A ₁ C level greater than 9.0% (poor control).
Blood Pressure Management	Percentage of patients with diabetes who had their blood pressure documented in the past year less than 140/90 mm Hg
Lipid Measurement	Percentage of patients with diabetes with at least one Low Density Lipoprotein cholesterol (LDL-C) test (or ALL component tests).
LDL Cholesterol Level (<130mg/dL	Percentage of patients with diabetes with most recent LDL-C less than 100 mg/dL or less than 130 mg/dL
Use of Appropriate Medications for People w/ Asthma	Percentage of individuals who were identified as having persistent asthma during the year prior to the measurement year and who were appropriately prescribed asthma medications (e.g. inhaled corticosteroids) during the measurement year.
Asthma: Pharmacologic Therapy	Percentage of all individuals with mild, moderate, or severe persistent asthma who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment.

Table 2. Potential Ethical Problems in the Implementation of Pay-for-Performance

1.	Lack of proven safety and benefit for patients
2.	Inadequate definitions of quality
3.	Inadequate measures of quality
4.	Misallocating the locus of accountability for quality improvement
5.	Potential for adverse effects on patients and vulnerable populations including: <ul style="list-style-type: none">a. lack of individualized careb. decreased patient autonomyc. refractory patients seen as obstacles to bonusesd. dropping of refractory or vulnerable patientse. worse care for patients of less well-off physicians or physician groupsf. deterioration of the doctor-patient relationshipg. shorter time for patient visits
6.	Potential for adverse effects on physicians including: <ul style="list-style-type: none">a. unjust or inadequate physician compensationb. conflicts of interest between patient goals and performance targetsc. erosion of professionalismd. physicians in less well-off practices left with fewer resourcese. increased administration and less time for patient caref. increased pressure to practice defensive medicineg. increased frustration and decreased job satisfactionh. reduced physician autonomyi. deterioration of the doctor-patient relationship
7.	Potential for adverse effects on society including: <ul style="list-style-type: none">a. decreasing supply of primary care physiciansb. deteriorating health care access and qualityc. negligible marginal value / wasted health care resourcesd. backlash by patients and physicians
8.	Lack of structured monitoring for adverse outcomes

Table 3. Major strategies needed to transition from risky pay-for-performance arrangements to ethical systems that reward genuine health care quality.

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1. Current pay-for-performance systems should rapidly adopt safeguards to protect vulnerable populations (see Table 4);

 2. Key stakeholders should develop consensus regarding their responsibilities in improving health care quality (see Table 5);

 3. Researchers and policy makers should develop valid and comprehensive quality measures for use in the next generation of compensation systems that reward genuine quality (see Table 6); and

 4. Researchers and policy makers should use a cautious evaluative approach to long-term development of compensation systems that reward quality.
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Table 4. Recommended safeguards to protect vulnerable populations and prevent unintended consequences within current pay-for-performance systems.

a.	Balance current population-level measurements with the best available measures of quality from the patient perspective;
b.	Reduce or stabilize the percentage of physicians' salaries at stake (except as in point 3 below);
c.	Provide adequate off-setting compensation for physicians serving vulnerable patients;
d.	Population-level measures should: <ul style="list-style-type: none">i. be evidence-based and clearly linked to valued patient outcomes;ii. assess domains clearly within the influence of the physician or physician group, especially for complex patients;iii. assess quality at the level of large physician practices rather than individual physicians; andiv. assess improvement toward goals in addition to achievement of cut-points.
e.	If systems utilize population-level <i>outcomes</i> measures, they should: <ul style="list-style-type: none">i. explicitly assess patient complexity and vulnerability;ii. carefully adjust for case-mix based on relevant patient factors; andiii. carefully adjust for the manner in which responsibility for patient outcomes is shared between physicians, patients, health plans, and other health care institutions.
f.	Initiate monitoring before and after implementing the above changes. Monitoring should assess: <ul style="list-style-type: none">i. patient satisfaction, access, continuity, and coordination of care; effects on vulnerable patients as a particularly important focus;ii. physician satisfaction and professionalism, administrative burden, effects on the patient-physician relationship,iii. effects on disparities between physician practices serving vulnerable and non-vulnerable populations; andiv. payer satisfaction and value for health care expenditures.

Table 5: Examples of quality-related healthcare obligations of physicians, healthcare institutions, and patients.

Quality-related Obligations	Physicians		Healthcare institutions and Political Leaders ¹		Patients
	to the Patient	to the Population	to the Patient	to the Population	to the Population
With the best reasonable effort and consistent with current professional knowledge:					
Be accessible for timely patient encounters or arrange appropriate coverage	X				
Accurately identify the patient’s goals within a trusting, compassionate, and communicative clinical relationship	X				
Guide or help shape the patient’s goals in a beneficent manner that is respectful of patient autonomy	X				
Determine how to achieve the patient’s goals in a manner that maximizes benefit and minimizes risk	X				
Initiate and skillfully carry through processes of care that enable achievement of the patient’s goals	X				
Measure effects of care processes to enable an iterative reevaluation of the patient’s goals	X				
Advocate for or provide fair resource levels to maximize the patient’s access to existing services	X		X		
Facilitate coordination and continuity of care for the patient among appropriate healthcare providers	X		X		
Advocate for improving existing services or implementing new ones to enable achievement of the patient’s goals	X		X		
Facilitate or participate in ethical healthcare interventions enabling equitable, efficient, or greater distribution of health or healthcare resources		X		X	X
Facilitate or participate in fair deliberation processes enabling equitable, efficient, or greater distribution of health or healthcare resources		X		X	X
Facilitate or participate in monitoring physician and healthcare institution quality		X		X	X

¹ Healthcare institutions include physician groups and practice associations, clinics, hospitals and hospital networks, private health insurers, and public payers such as Medicare and Medicaid

Table 6. Essential characteristics of health care quality measures

a.	Valid
b.	Designed to reduce health care disparities
c.	Achievable
d.	Comprehensive
e.	Individualized
f.	Developed and assessed by physicians
g.	Developed transparently and fairly:
h.	Subject to assessment:
i.	Not overly intrusive, expensive, or onerous

Table 7. Major conclusions of the SGIM Ethics Committee regarding ethical issues in pay-for-performance.

1.	The basic premises of pay-for-performance are not unethical.
2.	Current pay-for-performance approaches are guided by a flawed understanding of health care quality
3.	The implementation of pay-for-performance has been highly questionable from an ethical perspective because of: <ul style="list-style-type: none">a. scant data supporting safety and efficacyb. significant potential for adverse effects on patients, vulnerable populations, physicians, and societyc. lack of structured monitoring for adverse outcomes
4.	Poorly designed pay-for-performance systems may be causing adverse effects including: <ul style="list-style-type: none">a. deteriorating access to care for vulnerable populationsb. erosion of patient trustc. fostering breeches of professionalism
5.	Whether current pay-for-performance approaches can be ethical even after implementing safeguards is an open question requiring further research
6.	Before rigorous data of safety and effectiveness become available, widespread expansion of untested pay-for-performance systems is an ethically misguided policy.
7.	Carefully designed pay-for-performance systems informed by ethical review and rigorous research could improve the quality of patient care, the fairness of physician compensation, and value for money spent on health care.
8.	Four major strategies are needed to transition from risky pay-for-performance arrangements to ethical systems that reward genuine health care quality: <ul style="list-style-type: none">a. Current pay-for-performance systems should rapidly adopt safeguards to protect vulnerable populations;b. Key stakeholders should develop consensus regarding their responsibilities in improving health care quality;c. Researchers and policy makers should develop valid and comprehensive quality measures for use in the next generation of compensation systems that reward genuine quality; andd. Researchers and policy makers should use a cautious evaluative approach to long-term development of compensation systems that reward quality.

Table 8. Recommendations regarding SGIM’s role in promoting high quality health care and ethical performance-based physician compensation

1.	Maintain a proactive role in promoting high quality care and ethical physician compensation
2.	Involve members and general internists in: <ul style="list-style-type: none">a. articulating the quality-related obligations that physicians and health care institutions have to patients and the populationb. developing valid measures of physician, health care institution, and population-level health care qualityc. designing evidence-based pay-for-quality systemsd. recommending studies and measures to evaluate the efficacy of performance-based physician compensatione. monitoring effects on vulnerable populations and physicians
3.	Develop initiatives to promote professionalism as a primary driver of high quality care even under flawed compensation arrangements
4.	Consider creating a permanent SGIM body to examine and monitor issues in quality of care and physician compensation

Figure 1. A framework for evaluating the effectiveness and ethical aspects of pay-for-performance compensation systems

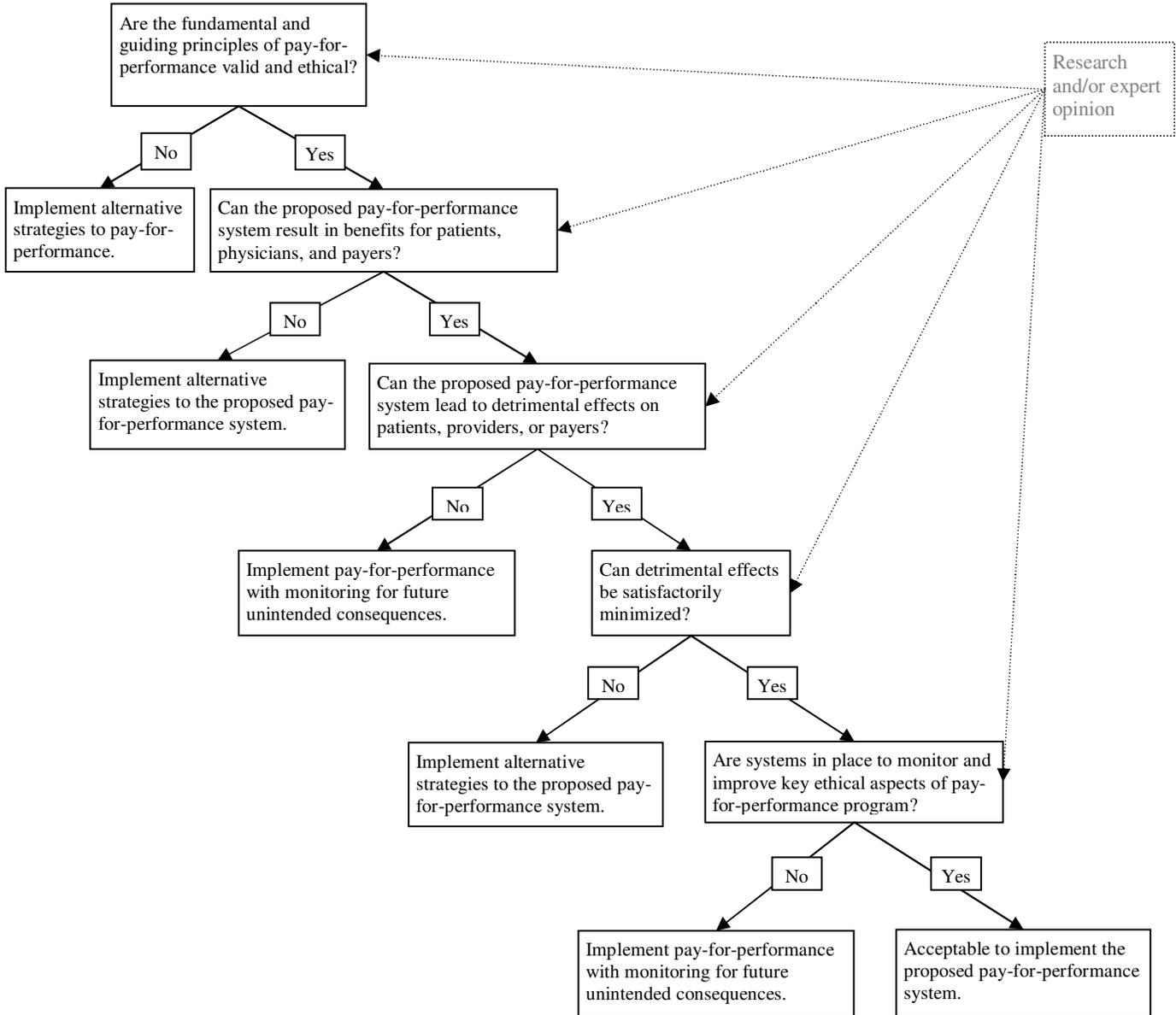


Figure 2. Prerequisites for ethical pay-for-performance systems and the resulting beneficial effects

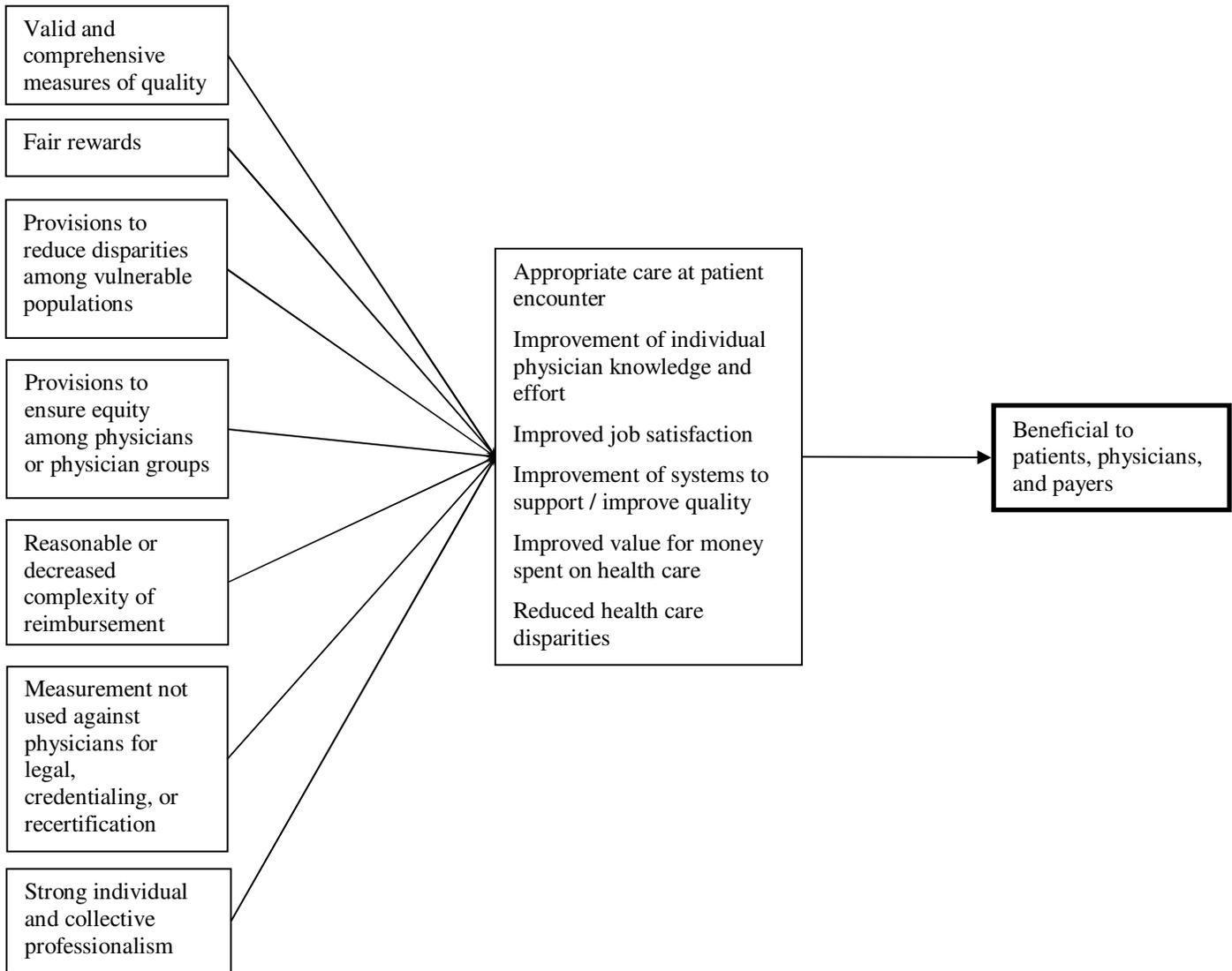
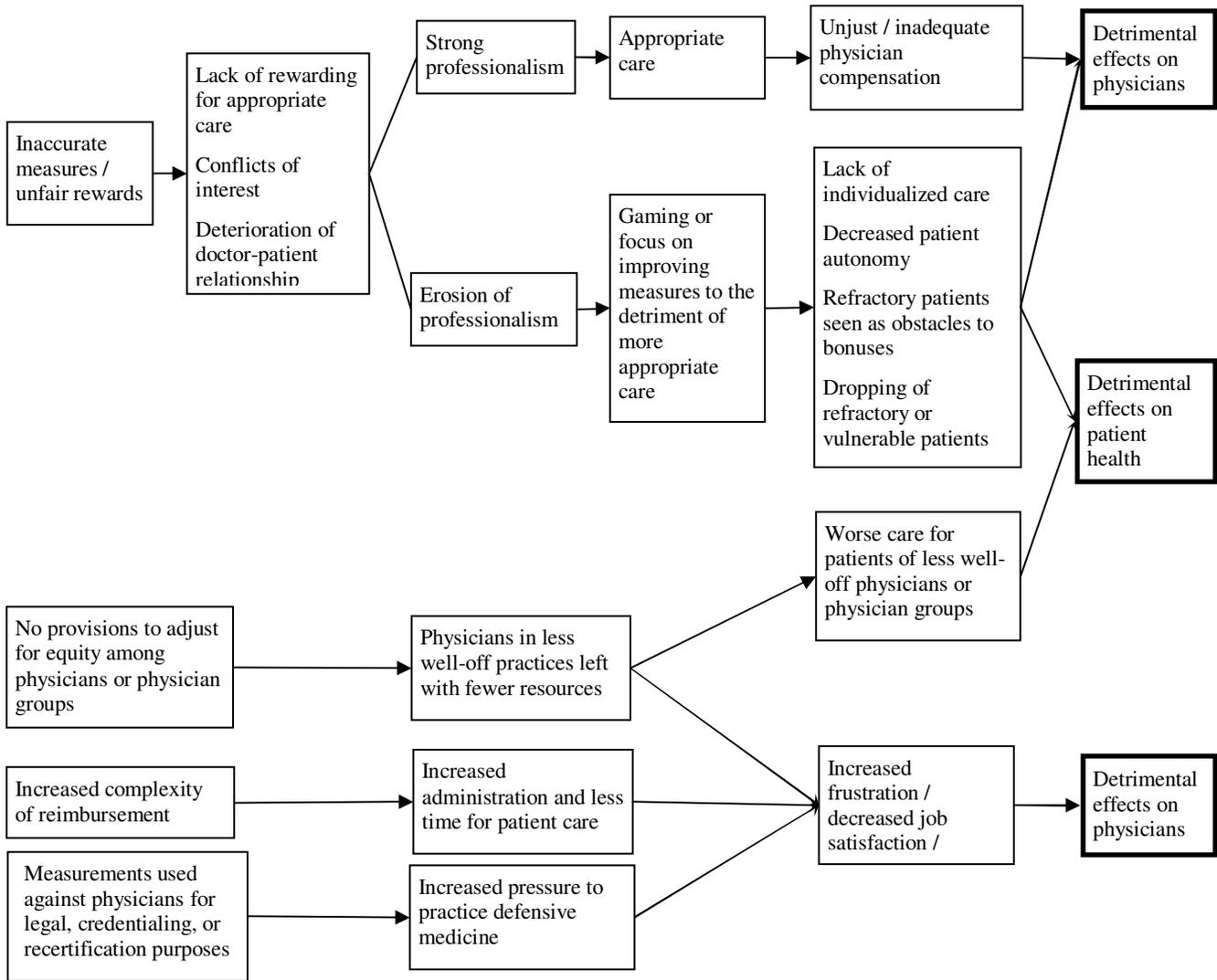


Figure 3. Conditions leading to unethical pay-for-performance systems and the resulting detrimental effects



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