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Hearing on Examining Pay-for-Performance Measures and Other Trends in Employer-Sponsored Health Care
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Chairman Johnson, distinguished Committee members, thank you for inviting me to discuss pay-for-performance in health care. In my remarks, I will describe recent efforts by health plans and employers to reward physicians and hospitals for providing high-value health care and discuss the economic incentives inherent in the design of these programs. My comments derive from my research in this area over the past several years, which has been funded by the Agency for Healthcare Research and Quality (AHRQ), The Commonwealth Fund, and the Robert Wood Johnson Foundation's Health Care Financing and Organization initiative. The views expressed in my testimony are, of course, my own and should not be attributed to any of these funding agencies.

Pay-for-performance has significant positive potential in the health care sector, where reimbursement has traditionally been based only on utilization of services and patients are often not in a position to discern high quality from low. In this environment, incentives to deliver high-value health care are often absent or even negative (e.g., preventing a hospital admission will generally reduce the net revenues of a health system that includes a hospital). Pay-for-performance is still new to health care, however, and payers face a number of challenges in implementing these programs.

First, there is little guidance in the literature for purchasers and health plans to reference when they set out to design their pay-for-performance programs. An analysis of the features of the first generation of programs indicates that there are opportunities to improve the cost-effectiveness of pay-for-performance and increase the likely gains in quality and value. To help them design more effective pay-for-performance programs, purchasers and health plans need timely evaluations of a broad range of programs and targeted decision support. Congress could facilitate progress towards this end by enhancing the capacity of AHRQ, which has played a critical role in this area.

Second, coordination among payers on the clinical domains and specific quality measures to target is desirable. If only a few of the many payers that a provider contracts with are paying for performance, or if each payer focuses on a different measure set, the effects of pay-for-performance may be diluted. Some private sector employers have already begun aligning their efforts through health care quality improvement coalitions such as the Leapfrog Group, Bridges to Excellence, and others, which offer standardized programs of performance measurement, reporting, and reward. The leadership role of the Centers for Medicare and Medicaid Services (CMS) in this area may go a long way towards this goal as private payers have historically emulated many of Medicare's more significant

payment reforms, such as the Prospective Payment System. CMS could also support pay-for-performance efforts further by contributing de-identified data to an all-payer data set from which more reliable performance evaluation could be conducted (because of larger denominators).

Finally, despite the hopes of some benefit purchasers, the current generation of pay-for-performance is not designed to reap cost savings, particularly since most of the quality measures it targets are measures of underuse. In my view, it would be desirable to enlist pay-for-performance in the service of enlightened cost control in order to preserve the availability of private insurance coverage. There is some indication that pay-for-performance is being reoriented towards cost savings with the incorporation of increasingly robust cost-efficiency metrics, which are being refined by a number of researchers. Along these lines, payers could also greatly benefit from a public investment in the development of quality measures that capture the negative consequences of overuse.

Pay-for-performance should be viewed as one element of the set of strategies that employers, health plans, and government programs are undertaking to improve the value of health care spending and make insurance coverage more affordable. Other promising tools that are taking hold alongside pay-for-performance include public reporting of quality and cost information; tiered benefit designs that give consumers incentives to choose higher-quality and lower-cost providers and treatments; shared risk payment models such as the one being evaluated under the Centers for Medicare and Medicaid Services Provider Group Practice demonstration; and disease management. All of these approaches to cost control and quality improvement are evolving and come with their own set of advantages and disadvantages. Because there is very little evidence base that can be drawn upon to inform the design and implementation of these efforts, it is critical that the natural experiments being undertaken by both public and private insurers be evaluated and the results disseminated effectively to key decision makers.

Payers Increasingly Align Financial Incentives with Quality Goals

During the past three years, numerous employers, purchasing coalitions, and health plans in the U.S. have announced new efforts to pay providers for performance on quality and cost-efficiency measures. The most recent estimates suggest that there are more than 100 individual pay-for-performance efforts underway in the U.S. health care sector. These programs vary along a number of dimensions including (among others) the type of sponsor, the size of the bonus, the formula for determining the bonus allocation, and the clinical areas targeted. I describe several examples to illustrate the diversity of approaches and then highlight the most prevalent program features and their economic and policy implications.

In California, seven health plans are coordinating pay-for-performance programs under the auspices of the Integrated HealthCare Association (IHA), a multi-stakeholder coalition. The seven plans, which constitute more than 60% of the commercial market for physician services in the state, are awarding bonuses to large, multispecialty physician groups based on clinical process measures such as rates of childhood immunizations and

cholesterol screening, patient satisfaction, and investments made in technology and infrastructure. While the performance measures are common across the seven IHA health plans, the structure of the bonus varies. Most plans have opted to reward the top performers only (e.g., the top deciles or quartiles) using a bonus that is proportional to the number of the plan's patients cared for by the group.

Similarly, Anthem's New Hampshire Blue Cross/Blue Shield plan pays bonuses to physicians who screen patients for breast, cervical, and prostate cancer and high cholesterol, help patients manage diabetes, and provide other recommended preventive health care. Anthem's performance bonus was $20 per patient for the top quartile of physicians and about half of that for physicians ranked between the 50th and 75th percentile. Physicians were also eligible for an additional payment of $20 per patient for participating in the plan's disease management program.

Another noteworthy physician reward program is Bridges to Excellence, a growing collaborative effort started by several large employers including General Electric and Verizon Communications. The program offers $100 per diabetic patient to physicians who become certified by National Committee for Quality Assurance/American Diabetes Association's provider recognition program. A similar program for cardiac care has also been launched. Finally, doctors can receive $55 per patient for establishing clinical information systems in their offices that aid in regular follow up in the care of chronically ill patients, and implementing patient education programs. Many of the measures within each of the areas targeted by Bridges to Excellence are structural in nature (i.e., they catalogue the existence of specific elements of infrastructure or capacity such as an electronic medical record), although both process and outcome measures are also featured in the scorecards associated with each area of focus.

Finally, as you may know, CMS has been actively developing its own pay-for-performance programs. In July 2003, CMS and Premier, Inc., a nationwide organization of not-for-profit hospitals, announced a demonstration project to provide quality bonuses for hospitals based on performance related to treatment in five clinical areas that are particularly critical for Medicare's elderly population: heart attack, heart failure, pneumonia, coronary artery bypass surgery, and hip and knee replacements. Performance measures include both process and outcome measures. For example, the set of measures for coronary artery bypass surgery includes rates of aspirin prescribed at discharge, inpatient mortality, and post-operative hemorrhage or hematoma. Hospitals are scored and ranked on the measures condition by condition and any hospital in the top 10 percent for a given condition will receive a 2 percent bonus on their Medicare payments; hospitals in the next 10 percent will receive a bonus of 1 percent. In the third and final year of the demonstration, the hospitals with the worst performance (those that fall below a predetermined threshold) will be financially penalized. Early results disseminated by CMS suggest that substantial improvement has occurred among the participating Premier hospitals in the targeted clinical domains. (See http://www.cms.hhs.gov/media/press/release.asp?Counter=1441.) In addition to the Premier demonstration, CMS has incorporated pay-for-performance features into its Provider Group Practice and Health Support demonstrations. For example, in the Health

Support program, disease management contractors have guaranteed savings to CMS and will also be made financially accountable for a variety of performance measures including patient satisfaction.

Common Themes Among Pay-for-Performance Programs

The majority of pay-for-performance arrangements target both measures of clinical quality and patient experience. Particularly for physicians, clinical quality measures are typically rates of preventive care and other "process measures" that can be easily extracted from administrative data. Nearly all of these process measures address problems of under use: they measure the rate of use of recommended care for specific population groups. The focus on process measures reflects the state of quality measurement (particularly our ability to account for underlying patient differences across physicians and hospitals) rather than priorities for quality improvement. Thus, in the current context, paying for performance almost always means rewarding physicians and hospitals for delivering more services, for which they may also be able to bill (depending upon the reimbursement system). Perhaps in recognition of the cost implications of correcting underuse through pay-for-performance, as pay-for-performance programs have evolved payers are also increasingly providing incentives for performance on cost-efficiency metrics (Baker and Carter 2004).

Almost without exception current pay-for-performance programs reward the best providers—all those either above a specific threshold or percentile ranking. Quality improvement is not explicitly required for the receipt of a bonus so that in practice the incentives to improve will vary with baseline performance. Particularly with an absolute performance threshold (e.g., an 80 percent childhood immunization rate), physicians, or hospitals that already meet the standard need only to maintain the *status quo* to receive payment. Similarly, for bonuses that are tied to the use of information technology or other "structural" measures of quality, such as having a patient registry, payments will go not only to those providers that improve their infrastructure, but also to every provider that already conforms to the standards. Most payers understand this very clearly and believe that it is important to reward providers that deliver the best quality care even if the rewards do not provide incentives for change.

It is also noteworthy that among pay-for-performance programs in the U.S., few payers put at risk more than 5 percent of payments. Moreover, because of the small market shares of some pay-for-performance program sponsors, the percent of a physician's overall revenue that is at stake can be much less than 5 percent. From an economic standpoint, the gain from quality improvement must counterbalance the cost, so if the quality improvement goals we set for providers are costly to achieve the current levels of payment may be insufficient to generate the desired response.

What Is Known About the Effectiveness of Pay-for-Performance?

Two recent reviews document the scarcity of evidence to support the effectiveness of pay-for-performance in health care (Rosenthal and Frank *In Press*; Dudley et al. 2004). These reviews identify only seven evaluations in the health care literature that are pertinent (Amundson 2003, Fairbrother et al. 1999; Geron 1991; Hillman et al. 1998;

Hillman et al. 1999, Kouides et al; 1998; Roski et al. 2003), one of which offered no interpretable results (Geron 1991). Among the other six studies, three (among which were those with the strongest research designs) yielded null results (Hillman et al. 1998; Hillman et al. 1999; Fairbrother et al. 1999). Two other controlled studies found modest improvements with pay-for-performance (Kouides et al. 1998; Roski et al. 2003) while the sixth study demonstrated substantial performance improvement but no evidence with regard to how much of this was due to the program rather than secular trends. (Amundson et al. 2003) Five of these six studies involved interventions targeting only a single dimension of care such as childhood immunizations (Fairbrother et al. 1999; Geron 1991; Hillman et al. 1998; Hillman et al. 1999, Kouides et al; 1998; Roski et al. 2003) and most of these provided only small rewards. In one of the two studies with positive findings linked to pay-for-performance, it was found that most of the gain in performance was achieved through better documentation of immunizations provided outside the physician's practice rather than improvements in immunization rates *per se*. While improved documentation may be valuable, it was certainly not the main goal of the program.

Outside of the health care sector, there are a variety of studies of similar incentive programs, the results of which are relevant to health care (Rosenthal and Frank, *In Press*.) Pay-for-performance programs have been used in schools and several recent experiments have documented improvements in test scores and other outcomes under these programs (Lavy 2002; Clotfelter and Ladd 1996; Hanushek and Jorgenson 1996.) One of these studies, by Lavy (2002), also demonstrated that pay-for-performance was more cost-effective (produced a larger impact for the same expenditure) than direct subsidies for new programs and additional staff time. Pay-for-performance has also been incorporated into Federal contracts for job training programs. Studies examining these programs found that pay-for-performance had a positive impact on the rate of job placement and average earnings, even after accounting for gaming on the part of contractors.

Empirical evidence regarding the existence of unintended consequences of pay-for-performance both inside and outside of health care is relatively well-established. Gaming has been shown to occur with pay-for-performance systems among return-to-work programs and schools, largely in the form of selecting trainees and students with the highest *ex ante* probability of success. In health care, both physicians and hospitals have been found to attempt to select healthier patients under prospective payment to maximize net revenues. Other possible negative effects of targeted incentives including reductions in quality of care in areas not targeted for financial rewards, which may be a particular concern in primary care because of the broad scope of practice, have simply not been evaluated empirically.

Key Policy Issues

Through the lens of economic theory and empirical evidence, my review of current pay-for-performance programs yields three key policy issues. First, there is little guidance in the literature for purchasers and health plans to reference when they set out to design their pay-for-performance programs. An analysis of the features of the first generation of programs indicates that there are opportunities to improve the cost-effectiveness of pay-

for-performance and increase the likely gains in quality of care. To help them design more effective pay-for-performance programs, purchasers and health plans need timely evaluations of a broad range of programs and targeted decision support. Congress could facilitate progress towards this end by enhancing the funding capacity of the AHRQ, which has played a critical role in this area.

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