



PROMETHEUS: Provider Payment For High Quality Care

A White Paper

Executive Summary

Rather than replacing the two main payment models prevalent in the US – fee-for-service and capitation – PROMETHEUS Payment addresses their shortcomings, and attempts to create a payment environment where doing the right things for the patient helps providers and insurers also do well for themselves.

Overall, PROMETHEUS is not an entirely new concept. Case rates and global fees, which are its central elements, have been around for decades¹. But there are three important innovations included in PROMETHEUS that clearly differentiate it from prior models:

1. The basis for the case rates is evidence-based guidelines and includes adjustments for patient severity of disease. Exemplary performers can get more than 100% of the case rate.
2. Clinical integration around the care of the whole patient – not just parts – is explicitly encouraged and rewarded through a Comprehensive Scorecard that includes measures of clinical process and outcomes of care, patient experience with care received, and in many instances, cost-efficiency.
3. It is designed to accommodate a wide range of physician specialties, hospitals, other health care providers, and the many ways they are organized to deliver care – from large integrated delivery networks to individual practitioners.

A team, of experts in health care economics, law, policy, plan operations, and performance measurement carefully designed these innovations.² This White Paper includes the basic concepts for any organization to bring them to life. One purpose of PROMETHEUS is to create a setting that improves the work environment for providers and improves quality of care for patients. Another is to help plans and purchasers to respond to one of the main challenges set forth by the Institute of Medicine's series of reports on the Quality of Care in America: to reform a toxic payment system.

That reform can only occur by (1) understanding the root causes for the failure of the current payment models and (2) designing processes that will mitigate their effects while encouraging the right behaviors. For example, broad-based capitation shifts insurance risk from insurers to providers. PROMETHEUS specifically avoids holding providers accountable for insurance risk. It does hold them accountable for their ability to provide excellent care. Similarly, fee-for-service shifts the responsibility for prudent and wise use of resources from providers to insurers. PROMETHEUS holds providers accountable for the efficient use of resources, but it frees them to manage those resources in any way they see fit and removes current artificial barriers to innovate.

¹ See Douglas Emery, Article prepared for the California Health Care Foundation – March 2006 for a description of past and current efforts in modeling and paying for case rates.
http://www.bridgestoexcellence.org/bte/wp_prometheus.htm

² See Appendix A for a list.

Implementing PROMETHEUS Payment will require creating an operational infrastructure (an “Engine”) that can bolt on to existing plan claims payment systems to perform the following five tasks:

- a) establish severity-adjusted Evidence-based Case Rates (ECRs),
- b) determine the appropriate allocation of those case-rates across different types of providers treating the same patient,
- c) track the performance of all providers caring for the patient covered by the ECR, and
- d) reconcile all payments to reward good performance.
- e) create a Scorecard to report and pay for quality and efficiency

The design team acknowledges the significant complexities contained within each of these five tasks and the substantial effort it will take to make each operational. As such, while the specifications of the Engine will be in the public domain –enabling any health plan to build its own version – PROMETHEUS-certified vendors will be available in the market to enable any plan to implement the payment model in a way that is consistent with all the principles and design elements in this White Paper and can, therefore, claim the PROMETHEUS brand. This will reduce an individual plan’s implementation costs and increase its ability to adopt the model. Requests for Information (RFIs) to prospective companies have been issued and will be reviewed by the design team to carefully select potential candidates.

Although there are clear limitations to what can be covered under the scope of ECRs today, the design team expects that specialty societies and other medical professional organizations will rise to a new challenge: to develop additional valid clinical practice guidelines that take into account this application and can form the basis for case rates covering the majority of conditions and procedures.

Finally, this Paper does not discuss health care benefit design in any detail, focusing instead on the payment system, but it does recognize the central importance of consumers as a force for change. We expect health plans and purchasers to implement changes to their health care benefits that will cause plan members to become sensitive to the relative cost and quality of the physicians and hospitals from whom they seek care. It is our contention that there are three central pillars to support a sustainable transformation in the US health care system: payment reform, transparency, and consumer activation. This Paper addresses the first two. Payers and purchasers have already started addressing the third.³

There are many aspects of this model that will have to be tested, evaluated, and refined, and that is what we propose to do by launching pilots in different market environments. We expect to learn a lot from those efforts and to engage plans and providers actively in pilot design and implementation so that the model reflects a true alignment between what should be paid to deliver high value care and what is actually paid. To that end, the design team will be issuing a Request for Proposal (RFP) to solicit response from diverse areas around the country where the team believes there is potential to bring industry stakeholders together in a collaborative effort to pilot the payment model.

³ Marc Berg, Wim Schellekens, Francois de Brantes, Excerpt of Editorial – International Journal for Quality in Health Care, April 2006. http://www.bridgestoexcellence.org/bte/wp_prometheus.htm

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Foreword

In this paper we outline the model for a substantial change in the way physicians, hospitals and other care givers may be paid for significant aspects of American health care. We define the concept, the principles and the benefits of using evidence-based case rates (ECRs) as a preferred mode for provider payment.

At the outset, we recognize that the implementation of ECRs in the market, through carefully designed pilot experiments, will be the ultimate learning laboratory in which many of the salient aspects of the model will be tested and refined. In many instances we describe an ideal state, not necessarily the initial implementation state. Where important, we note the expected differences between initial implementation and a longer-term environment.

Of the three innovations that constitute the primary differentiators of this model, the concept of “virtual integration” and the specific meaning that we give it requires up front emphasis and clarification. While integration is most commonly interpreted as the legal consolidation of providers to deliver care to patients, virtual integration does not require any legal or even financial consolidation. The virtual integration we describe in this paper is achieved by linking the performance of providers around the care of a patient, whether they practice in a group or completely independently. The administration of ECRs can also be virtual and does not require the use of prospective payment to work. Although we believe that prospective payment will yield more reduced administrative burdens, we believe this model can also be well executed in a fee-for-service environment because through virtual integration a retrospective look at the cost and quality of the care delivered to the patient by all providers can offer the same incentives.

Finally, while we explicitly acknowledge the difficulty of implementing any change, we want to emphasize that adopting a different payment mode will require a significant effort on the part of willing payers and willing providers. We have hoped for other options to emerge in the market. We have seen none. Those willing to take the risk and expend the effort to make PROMETHEUS Payment real will deserve all the credit for bringing this model to life.

Introduction: The Need for Innovation

The American health care system is not routinely providing the high quality of care that we expect.⁴ This recognition is the impetus for the current wide range of initiatives⁵ to improve quality through increased use of measurement, public and private reporting of results, and incentives for better performance. At the same time, health care expenditures are growing at a pace three times that of the rest of the economy. The current provider payment systems that predominate in American health care --- fee for service, capitation, and their variants --- have not produced either the quality we would desire, or rational control over health care costs. Fee for service (FFS) had been the bedrock of physician payment for many years but generated little evidence of quality and contributed to significant cost escalation because of its incentives to overuse. Although capitation had been favored as part of the move to managed care and more control over costs, it raised concerns about underuse of needed services and conflict for physicians in their role as an advocate for patients. Evidence of misuse, underuse and overuse of health care services as well as problems of medical errors have been found in all payment systems. None of the current payment models has proven to be aligned with the objective of delivering the right care for patients.⁶

Beginning in a few markets and with certain health plans in the late 1990s, and on a more widespread basis recently in the early years of this century⁷, the movement toward Pay for Performance (P4P) programs has begun to address explicitly some of these problems. Variably sponsored by health plans and employers, these programs are mostly intended to reward with additional monies provider quality performance demonstrated by evaluation of structure, process and outcomes of care. While there is some evidence that P4P programs aimed both at hospitals⁸ and physicians⁹ are producing some improvement on the parameters measured, there are also real questions as to their sustainability, their true impact in terms of their costs of implementation¹⁰, and their application in the context of a payment system --- whether fee for

⁴ Galvin, Chassin et al. "The Urgent Need to Improve Health Care Quality," 280 JAMA 1060 (1998); Institute of Medicine, CROSSING THE QUALITY CHASM, Corrigan et. al, ed (2001); McGlynn, et. al, "The Quality of Health Care Delivered to Adults in the United States," 548 NEJM 2635 (2003)

⁵ Gosfield, "The Performance Measures Ball: Too Many Tunes, Too Many Dancers?" HEALTH LAW HANDBOOK, 2005 ed., West Group, pp 227-284

⁶ Institute of Medicine, TO ERR IS HUMAN, (Kohn et. al, eds. (1999))

⁷ See Rosenthal et al., "Paying for Quality: Providers' Incentives for Quality Improvement" 23 Health Affairs 127 (Mar/Apr 2004). For a searchable list of P4P programs see <http://ir.leapfroggroup.org/compendium/>

⁸ See Press Release, "Medicare Pay-for-Performance Demonstration Shows Significant Quality of Care Improvement at Participating Hospitals," CMS Office of Public Affairs, (May 3, 2005); <http://www.cms.kks.gov/media/press/release.asp?counter=1441>

⁹ See Bridges to Excellence "Evaluation of the Diabetes Care Link," (Feb/Mar 2005); http://www.brdgestoexcellenc.org/bte/pdf/DPRP_Eval_2005.pdf; and Press Release, "California Pay-for-Performance Results Show Improvements in Health Care Quality," Integrated Health care Association (July 5, 2005) <http://www.iha.org/070505.htm>

¹⁰ Rosenthal, et. al "Early Experience With Pay for Performance," 294 JAMA 1788 (Oct 12, 2005)

service, capitation or any of their variants -- that otherwise has failed to produce the quality of care we would want¹¹. Most agree that stand-alone P4P is a transitional phase in an on-going effort to more fundamentally reform the payment system. That is because current reimbursement mechanisms perpetuate a badly fragmented delivery system and do little to reward a systematic pursuit of excellence in care delivery and patient outcomes. Practice patterns vary for similar patients by region¹²; medical care that is not supported by evidence abounds; and providers, patients and purchasers have little solid information on the quality and outcomes of care they deliver, receive and pay for.

While those paying for care – primarily employers and government – and those receiving care – patients – have been or should be dissatisfied with the results produced by the current intersection of health care payment and delivery, those who deliver the care have also been increasingly profoundly dissatisfied and disheartened with respect to their ability to render optimal care given the other forces at work on them in this fragmented system.¹³ They believe the programs and mechanisms with which they must contend are administratively burdensome, overly controlling for irrelevant aspects of care and completely dissociated from both the science and art of medicine. Physicians often believe they are paid inadequately for what they are expected to do for patients, while the other administrative demands imposed on them actively thwart the 'time and touch' they would seek with their patients, in favor of onerous and time consuming prior authorizations, unwieldy documentation requirements, draconian fraud and abuse risks as well as malpractice liability.¹⁴ To truly improve the quality of care, make provider payment more equitable and appropriate, foster better coordination of care among the range of providers who interact with the patient, and provide more useful information to all the participants in the system including employers, health plans, providers, consumers and patients, a new and different approach will be necessary.

In its most concise description, the PROMETHEUS Payment model pays providers based on the cost of the resources required to deliver clinical practice guideline (CPG) based care—an Evidence-based Case Rate (ECR). Providers who are involved in related aspects of the care for a single patient are formally linked through a Comprehensive Scorecard; but they are not required to form new legal entities to participate. Top performers will get more than 100% of the ECR, while poor performers will get less than 100%. Providers are partially at risk for the cost, quality, and patient experience of the care they deliver, but their risk exists within a payment amount for which they have negotiated to account for their costs to provide evidence-based care.

¹¹ Gosfield, "Pay for Performance: Transitional At Best," Managed Care (Jan 2005) pp 64-69

¹² Fisher et al., "The Implications of Regional Variation in Medicare Spending: Part 1: The Context, Quantity and Accessibility of Care," 138 *Ann. Int. Med* 273 (Feb. 18, 2003)

¹³ Kassirer, "Doctor Discontent," 339 *NEJM* 1543 (Nov 19, 1998); Zuger, "Dissatisfaction with Medical Practice," 350 *NEJM* 68 (Jan 1, 2004)

¹⁴ Gosfield, "The Doctor-Patient Relationship As The Business Case for Quality," 37 Journal of Health Law 197 (2004)

They, therefore, are not at risk for the type of insurance risk¹⁵ commonly seen in broad-based capitation. Providers can be assigned multiple ECRs for an individual patient, although the PROMETHEUS Engine will reconcile these multiple ECRs to eliminate potentially redundant services.

The model described in this paper offers a new approach to reforming elements of the payment system and is designed to take into account the failures of the past system, the limitations of current P4P efforts, and the values of "Crossing the Quality Chasm". The PROMETHEUS design for **Provider payment Reform for Outcomes, Margins, Evidence, Transparency, Hassle reduction, Excellence, Understandability and Sustainability** is not a universal reform proposal, but an opportunity for plans and providers to collaborate voluntarily through negotiations reflecting specific payment principles. While the model proposes a new way of calculating the amount of payment for services, it will not supplant all fee-for-service and capitation payments, which will be retained where they represent the most expedient or appropriate method of paying for high quality care.

The PROMETHEUS system is designed to function within the current operational and administrative infrastructures of health plans and providers. It does not require collaboration among payers or financial integration of participating providers, and may be implemented in either an integrated or non-integrated setting. However, the system is designed to reward high performance in overall clinical effectiveness and efficiency that results from greater actual or virtual clinical and economic integration. "Actual" integration occurs when the system is implemented in an integrated delivery system (IDS) setting. "Virtual" integration occurs when the system is implemented where the providers are operationally and legally independent but they are integrated in a Scorecard which accounts for their combined efforts for the patient.

A payment system that integrates all services required to care for discrete, clearly delineated clinical conditions in a coordinated manner is an ideal match for an integrated delivery network, and as such, IDSs should benefit from the deployment of ECRs. However, because most Americans receive their health care from multiple independent providers, PROMETHEUS is designed to "virtually" integrate services from providers in order to distribute the ECRs. These may be either individual clinicians or independent medical groups joining with other providers solely for improved clinical delivery or entirely independent providers whose care is evaluated together in a Scorecard for payment purposes. (See p. 13 to understand the effect of this Scorecard integration.) This virtual integration is intended to partially substitute for the processes by which well-managed integrated delivery networks monitor the performance of their clinical personnel and reward them for providing effective, efficient care. In PROMETHEUS, providers are free to choose whatever combined configurations they choose, or none at all. Whether IDS or independent providers coming together naturally to work cooperatively on ECRs will prove to deliver greater value is one of the elements of the model that will be determined during the pilot phase.

¹⁵ Insurance risk is the risk of (a) the actual incidence of disease in the covered population by comparison with the actuarial assumptions that were included in the construction of the premiums and (b) whether the premium rate is sufficient to pay the medical expenses incurred by all the providers whose care is paid for by the insurance program. Insurance risk is different from the medical management risk providers are assigned in PROMETHEUS—to manage care efficiently within the amounts negotiated to treat the condition.

When a single integrated delivery network can provide all health care services required to manage an ECR, care can be coordinated and rewards apportioned within the network, and the payment of all services covered under the ECR can be made directly to the IDS. This arrangement is referred to here as “actual integration.” When health care services that are required to manage an ECR must be obtained from providers who are independent of one another - both operationally and economically – the care rendered may be aggregated and analyzed by the PROMETHEUS system as clinically integrated across the treatment of a single patient. This “virtual” integration permits PROMETHEUS to provide strong financial incentives for coordinated care even when the caregivers have no formal business relationship. In “virtual integration”, payments for services delivered under the scope of the ECR are made to the discrete providers (e.g. a hospital, a physician group, individual specialists, a pharmacy), not to an intermediary who would manage the funds and be responsible for paying all providers. No one bargains for or holds the money for any provider unless he chooses that approach.

The Payment Basis

Establishing fair and equitable case rates for treating not just parts of patients, but the patient as a whole, starts with establishing an appropriate payment base and building on that base. PROMETHEUS uses as a starting point the best evidence base to determine the basic level of services that should be given to patients for the conditions they have. Applying the best science available to treat a condition, as expressed in a good, agreed upon CPG and calculating the cost to provide that care is the first premise of PROMETHEUS Payment. We know that in every instance the evidence base for appropriate care is not equally strong, and in some instances may reflect strong consensus, but good CPGs even if not founded on randomized controlled trials are the first point of departure for an ECR. For example, according to good evidence-based guidelines, a patient with normal type 2 diabetes should get two visits a year, a complete blood profile, some level of medication, on-going follow-up, counseling and support on eating healthy and exercising, and home monitoring of blood sugar. In the long term, the ECR would reflect the costs to deliver the services established in the CPG, including office based care, laboratory services, drugs, home glucose monitor and more. Eventually, the actual negotiated cost to deliver that care would be calculated to set the ECR, taking into account the costs negotiated by providers to reflect their approach to delivering these services. Today, the techniques to establish such costs, particularly for physicians, are not widespread. To begin to make PROMETHEUS real, therefore, we have to start with some national base to set a price or budget for the ECR.

In the beginning the PROMETHEUS Engine will start by pricing basic sets of services set forth in a CPG using the average prevalent pricing in the market, as demonstrated by claims paid in large national databases, for care in accord with CPGs. The techniques to make such a calculation are possible today. In this way, we expect that in a good number of instances it will be possible to estimate savings, where typical patterns overall demonstrate overuse. Where exemplary providers are more parsimonious in their utilization of resources, by comparison with averages, they will see enhanced revenues because their payment will reflect higher average costs. Over time, these effects will balance as information on the cost for CPG based care becomes available as a basis for payment.

Claims data alone is not an equitable basis to establish a price because of the limits of current payment mechanisms inherent in paid claims. To lessen the potential for distortions here, the next step in establishing initial ECRs is to add on top of claims data an increase to account for normal clinical variation in patients and resource utilization in treatment for the same condition. This added cost factor protects against ECRs being too low to take into account all the care contemplated in the CPG for the variable population receiving that care. The full process to build an initial ECR is illustrated in the table below:

Base services	P*Q where P is the regionally adjusted ¹⁶ average market price for care services, and Q is the quantity of services listed in a guideline ¹⁷ and observed as being delivered by above average performing providers
Normal variation	The estimates of normal variation are derived by comparing the total cost of care for patients who receive good care with average total cost of care ¹⁸ . This variation represents the level of services beyond base that result from normal patient reactions to the care they received during the management of their condition
Profit margin	An additional profit margin is built in to all case rates at all levels of severity to ensure that providers have an appropriate incentive to deliver the best care possible for their patients irrespective of their severity

This calculation, however, would not be sufficient to assure equity in the initial budget for care for all providers implicated in delivering high quality care to the patient with that condition. So, in the initial calculations ECRs should be broad enough to enable freedom of clinical action by providers, but not so broad as to lose an ECR's homogeneity and potential application in the market. For example, there should only be one broad ECR covering diabetes, but there could be two ECRs covering brain tumors: metastatic and non-metastatic. ECRs also need to be risk-stratified in order for each patient's relative risk to be reflected in the total amount of resources needed to treat them.

According to the Institute of Medicine, good CPGs anticipate expected and common co-morbidities. By the same techniques, the occurrence of such co-morbidities can be priced as the beginning of risk stratification for an ECR. Then there are other co-morbidities and risk factors which can be evaluated based on CPGs for additional services which are necessary in specified instances. For example, where a patient with diabetes also has hypertension and coronary artery disease (CAD), these are additive cost factors but ought not to be calculated based on the added

¹⁶ During the pilot phase the regional price adjustment will be based on the Medicare price adjusters.

¹⁷ During the pilot phase guidelines will be selected from respected organizations such as the Institute for Clinical Systems Improvement (www.icsi.org), the American Heart and Stroke Associations, the National Comprehensive Cancer Network, and others.

¹⁸ Early estimates of the differences in variation between patients receiving good care and those that don't will be made using large claims databases and clinical databases, after having adjusted for the relative severity of the patients.

cost of a full CPG for hypertension and another full CPG for CAD¹⁹. There comes a point, however, as risk factors cumulate, that eventually the diabetes CPG for that condition is not the appropriate predicate for payment. When an ECR is triggered, when it ends (treatment is concluded), the typical stratifications in its application and when it is broken (e.g. the patient has a heart attack or a new diagnosis of cancer) must be established at the outset, and these rules made known and agreed to by the plans and providers at the outset. Vendors will develop the “Engine” for this.

Since PROMETHEUS is applicable to all provider settings—whether large integrated networks, multi-specialty groups, single specialty groups, hospitals, nursing homes, or individual providers—each ECR also has to be parsed to reflect the portion that is allocable to a principal physician, consultants, a pharmacy, a hospital or any other provider that cares for the patient. Providers negotiate with the plan for that part of the ECR which they will provide for patients with that condition. They can bargain for defined steps on the CPG, rendered solely by them or they can join with other providers to provide a broad array of the services in the CPG. They can negotiate to be paid separately or together.

As described further below, the Comprehensive Scorecard will act as the virtual integrator for independent providers since their performance will be judged both in terms of what they do, and what the other caregivers do. However, in some instances to reflect the specific mission of certain providers with especially vulnerable populations (e.g. hospitals with high levels of indigent care), the portion of the ECR that is allocated to them may be adjusted to reflect the special problems they confront²⁰.

To make referral decisions that enhance quality and efficiency as accounted for in the Scorecard, providers will need data about the scores of other providers. That data will not exist until at least a year of PROMETHEUS Payment has elapsed. So, in the first year providers’ performance will be scored based on their performance alone. After a year, the Scorecard will count (see below) the total cost of care that is attributable to that provider to include prescription drugs, durable medical equipment, and any other service that has been specifically prescribed or ordered by the provider.

A. The Payment Mechanism

Once the amount of payment has been negotiated for a provider treating within an ECR, there are two mechanisms of payment to the provider – prospective, and fee-for-service with retrospective reconciliation. It is the provider’s choice as to which method will apply and that choice will likely turn on the provider’s perception of its/his ability to manage delivery of care and financial administration of prospective payment.

While there are many providers – individual or in integrated groups – that can manage prospective payments, others cannot or will not want to. The PROMETHEUS Engine will be

¹⁹ Boyd et al, "Clinical Practice Guidelines and Quality of Care for Older Patients with Multiple Co-Morbid Diseases," 294 JAMA 716 (Aug 10, 2005)

²⁰ See http://www.bridgestoexcellence.org/bte/about_us/business_case.htm for a model of mission adjustments

designed to administer payment both ways. Under a prospective payment, the nature and size of the payment will depend on the type of ECR triggered. During the pilot phase, for the most part, chronic condition-related ECRs will be paid in monthly allocations over the course of a year or a shorter time if the ECR can be concluded within a shorter term. The fee for service approach pays claims as usual with a reconciliation at the conclusion of the ECR for savings as measured in the Scorecard. Both forms of payment are subject to a Performance Contingency Fund (explained in more detail at p.16) as a safeguard that the provider has delivered the services he bargained to render. These funds are designed to be a sufficiently small amount so as not to put the provider in deficit or at financial risk if he renders all the services he agreed to provide; but it is also intended to be large enough to motivate high performance to earn the dollars waiting in the fund to be paid to the provider. This method is also, we believe, a necessary safeguard to the plan, since all the other methods which plans use to assure that proper care has been rendered (e.g., prior authorization, concurrent utilization review, post payment review, post payment claims audit) are explicitly eliminated for ECR payment.

For chronic conditions the Contingency Fund is 10% of the provider's total payment for that patient. For acute conditions, it is 20%. The provider, therefore, is paid 90% of the monthly bargained amount for chronic care and 80% for acute care, when it/he is paid prospectively. In the fee for service model, each claim is subject to a reduction of 10% or 20%, as applicable. We believe that the full benefits for providers of this new model (see p.18) will best be realized in the prospective payment format, but by virtual integration, the program can be applied as well by those who are wary of unknown risks in prospective payment.

In addition, all claims related to an ECR (from the provider accepting the ECR and all others that care for the patient for the specific condition or procedure covered by the ECR) will be accumulated in the PROMETHEUS Tracker (an element of the Engine) to allow both the payer and the provider to monitor the total amount spent on the patient relative to the agreed-upon ECR. The money in the Performance Contingency Fund will then be paid based on the scores achieved by the provider and other providers caring for the patient on the Comprehensive Scorecard.

Where providers choose to form a team to provide an ECR to patients, the team can either have the plan act as a disbursing agent to each provider or the team can assign that function to a team member (or a third party). For example, if a group of orthopedists, a hospital, a physical therapy provider and a durable medical equipment provider joined together to provide an ECR for hip replacement, they might designate their own IPA or one provider among them to disburse funds to team members; or they might bid together but request the plan to pay them separately for their allocated portion of the ECR. Either way, the PROMETHEUS Engine is designed to administer the ECRs under any of the combinations mentioned above.

The following table illustrates how different groupings of providers will get paid in either the prospective payment mode or the retrospective review of fee-for-service mode.

	Prospective Payment	Retrospective Review of Fee-For-Service Payment
Integrated Delivery Systems (IDSs)	Get paid for whole patient, includes all portions of ECRs	Provider/provider organization bills on normal negotiated FFS schedule, gets paid 90 % (80%) with 10 % (20%) left in performance fund and tied to Scorecard. Payments are applied to the budgets in the ECR Tracker Plan can zero-pay claims or continue to pay when ECR is depleted – providers get on-going reports on ECR status
Virtual or real Teams or Groups	Providers get paid for their portion of the ECR for all covered patients. The providers designate the plan or an agent to be responsible for paying each provider.	
Individual Providers	Providers get paid for their individual ECR portion for a patient even if the other providers don't accept the ECR	

B. The Comprehensive Scorecard

A central feature of PROMETHEUS is the coupling of fair payment with transparency for all stakeholders. The vehicle for aggregating and disseminating information about cost, clinical quality, and patient experience is the Comprehensive Scorecard. Groups of stakeholders will require different information sets (e.g., more or less aggregation or granularity) and formats of presentation (e.g., visual display of bars versus raw numbers). All of these presumed variants are referred to as “the Scorecard.” It is “comprehensive” in that, unlike other forms of Scorecards used today, it encompasses all facets of the ECR including efficiency costs, risk-adjusted measures, patient perceptions, and structural components such as electronic health records.

The clinical quality measures are derived from the current best knowledge of what constitutes good care for each ECR. The Scorecard is the safeguard that the provider has delivered the excellence in care he agreed to provide. In addition, measures will reflect aspects of care that cut across patients, such as the effective use of information technology. Because good clinical practice guidelines reflect appropriate science, the measures used in the Scorecard will reflect the payment basis and are expected to be generally consistent with those in nationally accepted measure sets, such as AQA, NQF, NCQA, the RAND QA tools, and CAHPS. With regard to cost-efficiency, the Scorecard will take into account generally accepted industry-standard measures. The determination of the specific measures of quality and cost-efficiency that apply to any one provider will turn on the scope of care that provider is rendering under the bargained-for ECR.

Individual physicians, medical groups, hospitals, and integrated delivery systems would all be appropriate units of analysis for the Scorecard. Scores will be calculated and reported at the level of the contracting entity (which will vary). While some reports will be published,

internal reports produced contemporaneously for providers over time should also permit finer analysis so that groups and integrated systems can retrieve actionable data about the performance of their providers and improve their care delivery as a result. In fact, in non-integrated systems, providers will be held accountable for both their individual (or group) performance, along with the performance of all other providers that care for the patient, thus encouraging clinical integration.

The basic elements of the Scorecard are individual performance measures, many of which have denominators that are restricted to a subset of the population. So for example, in the area of preventive care, cervical cancer screening and mammography only apply to women in specific age ranges. Similarly, in the management of chronic conditions, certain process indicators of quality are only recommended for patients with more severe or complicated illness. For specific process measures, each indicator is scored based on the number of patients who received all the recommended intervention or tests divided by the number who should have done so based on the clinical guidelines. In contrast, structural measures are typically scaled in terms of the degree to which the structure has been implemented and is being used in accordance with evidence. Patient experience and outcome measures such as the summary score developed from the SF-36 are typically reported on 100-point scales.

Summary scores will be computed for the clinical domains covered by the ECRs (e.g. diabetes care) and within that ECR for clinical quality as well as patient experience. For composite process measures, summary scores are calculated by summing the total number of patients that received all the relevant processes and dividing the result by the sum of all patients covered by the ECR. Summary scores may be used for patient reporting, (where researchers have shown greater acceptance and salience of overall performance scores) and where denominators are too small to permit interpretation of individual measure scores. Importantly, performance measures will be calibrated to account for known lack of patient compliance, where that compliance can have a significant impact on the intermediate outcomes of the patient.

Data flow into the Scorecard from a variety of sources. First, providers will submit claims forms with CPT and ICD-9 codes that can be mapped to clinical process measures and cost-efficiency indices. In the prospective payment version of PROMETHEUS, these are not submitted for payment, so administrative support for the claim (e.g. E+M bullet point documentation) are not necessary because these “claims” are not audited. In prospective payment these “claims” are used to trigger and track care provided within the ECR. In fee for service they are paid as usual. Standardized patient surveys including CAHPS and SF-36 will be administered by the payer to collect patient experience and quality of life data. Other data will be obtained from provider self-report (subject to audit) or site surveys (e.g., information technology infrastructure). It is also envisioned that reports generated by electronic health records would be integrated into the Scorecard where those capabilities exist, and that this source of data would increase over time. The details of the Scorecard process will be created in the “Engine.”

In addition to making a contracting provider accountable for its own performance, the Scorecard is designed to play a second important role: to make non-integrated providers aware of and accountable for the performance of other providers. To accomplish this, the Scorecard

presents the aggregate quality and cost-efficiency scores for the specialists and hospitals to which a physician refers his/her patients. Moreover, these scores are weighted 30% in the computation of the overall score of the referring physician²¹, so he is 70% accountable for his own care and 30% for care rendered by others. This is a critical component of “virtual integration”.

C. The Performance Contingency Funds

The ECRs are defined so that the financing of health care is compatible with clinical evidence and consensus that support best practices. To ensure that physicians and other participating providers will have appropriate incentives to follow care recommendations and use resources efficiently, PROMETHEUS conditions a portion of the total payment on performance as measured through the Scorecard. The total amount deposited into the Performance Contingency Fund may vary by market and ECR type, but should generally be in the range of 10% to 20% of the total ECR (as already mentioned, the pilots will serve as natural experiments to test design elements including the percentage of the ECR tied to the Performance Contingency Fund). All Contingency Fund payouts are at the end of the year, regardless of when the ECRs terminate.

The basic elements of the performance-related payment calculation are the provider’s scores for clinical quality (including structure, process and outcome measures), patient experience, and cost-efficiency. Half of the Performance Contingency payment will depend on the overall quality score (which includes structure, process, outcomes and patient experience and functional status including 30% of that half based on other providers’ performance), and half on the efficiency score. How much of the Contingency Fund is returned is proportional to the provider’s performance, subject to a minimum performance threshold. That is, as long as performance exceeds a minimally acceptable threshold (which will vary by measure and market), the provider can always gain financially from improved performance. By encouraging both a base threshold performance, but also continued improvement in performance, the Contingency Funds avoid many of the current shortfalls of “pay-for-performance” programs. Because of the central importance of quality improvement in PROMETHEUS, we also envision that foregone quality withholds will be pooled and redistributed as additional bonuses for top performers which can subsidize additional quality improvement initiatives. The following example illustrates the mechanics of the performance-contingent component of the ECR:

The table below presents some data from a hypothetical Scorecard where an integrated delivery system has contracted for asthma and preventive care for a set of patients. In the illustration, the provider has met 53% of the applicable evidence-based care elements for asthma and 60% of those for primary prevention. The Quality of Life (QoL) and Patient Experience scores are measured on their own scales of zero to 100. Asthma Efficiency is the ratio of the average total actual treatment cost (for an IDS this would be the same as the simple sum of the ECRs it has prospectively received, adjusted for any care provided outside the IDS) for a standardized set of asthma patients by the IDS relative to the market mean of the same.

²¹ While every attempt will be made to only include providers to whom the physician has referred the patient, it is likely that all providers that cared for the patient will be included because of the practical inability to distinguish referred-to providers and patient-selected providers.

	Asthma Process	Preventive Care	QoL	Pt Exp	Eff-Asth
IDS Score	53	60	77	93.6	0.85

A weight is attached to each of the five scores, which translates into a dollar value of funds returned. For example, imagine we have a Performance Contingency Fund of \$10,000 and we assign the following weights: 20% Asthma Process, 10% Preventive Care, 10% QoL, 10% Pt Exp, and 50% Efficiency. Thus, the maximum award for good performance on the asthma measures is \$2000, for preventive care \$1000, etc.

1. Quality Payment Formula

For the asthma, preventive care, QoL, and patient experience scores, the bonus would be calculated as a simple, continuous function of the provider’s score and the bonus potential. For each of the five domains, there is a minimum acceptable score (e.g., 55%) and a maximum realistically achievable score (the best any provider could be expected to do given patient compliance issues, data failures, etc. – this may be 100% for some measures in some markets, but assume it is 95% here.) Then the payment is calculated as: (1) zero dollars for a score below 55%, (2) the full payment for a score at or above 95% and, (3) [(actual score – minimum acceptable score)/ (maximum achievable score – minimum acceptable score)] multiplied by the contingency payment available for this performance measure for all scores between 55% and 95%. In this way, the Contingency Fund is returned *pro rata* across the range of scores between the minimum and feasible maximum.

Given the scores related in the table above, the provider gets:

- nothing for asthma quality,
- $(60\% - 55\%) / 40\% * \$1,000 = \125 for preventive care,
- $(77\% - 65\%) / 30\% * \$1000 = \400 for QoL, and
- $(93.6\% - 85\%) / 10\% * \$1000 = \$860$ for patient experience.

In total, the provider is paid \$1,385 out of the \$5,000 Contingency Fund allocated to quality.

These rewards are predictable for any provider – a given level of performance will translate into a certain return. And the incentives are always to provide incrementally better care at any level of performance between the minimum and maximum thresholds. In addition, the balance of the foregone Quality Contingency Fund would be paid to the most exemplary performers as a year-end supplemental bonus for the top quartile who might choose to use those funds to support their own quality improvement efforts (e.g., to purchase IT or hire a case manager). Still further, because the full ECR contemplates that all of the elements measured in the guideline are provided, with *pro rata* Contingency Fund payment the provider does not “lose money:” because he failed to provide the element measured, he did not incur that cost.

2. Efficiency Payment Formula

To be eligible for any return of the Efficiency Contingency Fund, the provider has to meet the minimum Quality Fund threshold. Then, for all providers, the Efficiency Contingency Fund (\$5,000 in this example) would be returned in a similar proportional fashion. One half of the Contingency Fund for efficiency would be returned in its entirety to any provider with an efficiency index of .80 or less; no funds would be returned if the provider's efficiency index exceeded 1.20; for an index between .80 and 1.20 the payment would be calculated as a product of $(max - \text{actual index}) / (max - min)$. The efficiency index is measured as the ratio of total costs associated with patients for whom the provider has negotiated for an ECR (including costs associated with providers not accepting the ECR) with average costs in the market for all patients covered by an ECR (by ECR type). This payment returns to the providers up to one half of the Contingency Fund for efficiency but some providers can also expect still better margins for efficiency. In our example, the provider would receive: $[(1.20 - 0.85) / (1.20 - 0.80)] * \$5000 = \$4,375$.

Efficient providers who are paid prospectively have increased margins because they are paid and keep the difference between their actual costs of delivering care and the portion of the ECR they have accepted. Providers paid under fee-for-service arrangements do not experience the same cash flow benefit, but they still get additional monies at the conclusion of the ECR. The fundamental principle of the efficiency payment formula is the first principle below;

1. If the actual costs of the care delivered by a physician are less than the portion of the ECR they are responsible for, they would get the difference. For example, if the portion of the Asthma ECR the principal physician negotiated for is \$1000 per patient, and the actual cost achieved by the physician is \$800, then the physician would get (\$1000 - \$800). Any payout reflects the cumulative effect of these calculations on the patients whose care is paid on an ECR.
2. The second foundational principle is that the Efficiency Contingency Fund operates like an account for the provider against which deductions are made for utilization of resources. The calculations are slightly different depending on how the provider is paid. Prospectively paid providers will have to manage within the 80% or 90% paid to them, and are primarily at risk here for the actions of other providers to whom they refer. Providers paid fee for service are measured both for their own resource consumption, which is paid to them fee for service, as well as on the basis of what the providers they refer to do. To the extent either type of provider maintains utilization of resources within the ECR Budget that provider is paid the remainder. As under the #1 overarching principle above, if the actual costs incurred in the treatment of the patient under the ECR were \$1050, the \$50 excess utilization would be deducted from the Efficiency Fund assigned to that physician, multiplied by each of the patients on which there was overuse in this amount. Both types of providers would still be eligible to be paid the remainder, but the fee for service payment mechanism counts for that provider his resource consumption in claims paid to him.

3. For fee for service providers, there is an additional aspect of the Efficiency Contingency Fund which is intended to replicate the advantages of being in an integrated delivery system, when the physician is not integrated with anyone. At the same time, the fee for service provider is at somewhat more risk for the overall budget of the ECR as provided by non-participating physicians, but the provider can also realize an additional advantage that non-participating providers paid fee for service cannot realize:

The Performance Contingency Fund is created by withholding 10% or 20% of the ECR Budget for that provider's portion of the CPG. The withheld amount is dedicated one half to quality (as above) and the other half to efficiency. For fee for service providers who are paid claims as usual, they realize a returned payout of the Efficiency Fund remainder calculated as above, depending on their own resource consumption and the resource consumption of others. It is possible that FFS providers may manage relatively well or just at budget for their portion of the ECR, while the other providers, including non-participating providers, manage very well, so the overall effect is that total actual costs are under budget. For savings beyond the 30% of the fee for service physician's Efficiency Score that turns on other providers, the participating FFS provider gets allocated to his Efficiency Funds, a credit which can be used to improve the chance that he will get additional monies back on other ECRs. This additional impact works in the following way:

If total actual costs overall for patients treated by the FFS providers are lower than the sums of the ECRs they have contracted for, their Efficiency Contingency Fund is credited on a proportional basis for the difference. Assume that the total positive difference between the ECR budget and the actual costs for all patients treated for diabetes is \$10,000. Assume the FFS provider's share of the contracted portion is 50% of the budget. That provider's Efficiency Fund would be credited with \$5000 which can offset other relative inefficiencies on other ECRs, and eventually could be paid back to him. The net effect is to give the FFS physician an incentive to reduce overall costs of care, not simply to manage within their portion of the ECR.

Unlike Quality Contingency Funds, efficiency dollars which are not paid to the providers would not be redistributed; because they are returned to the payer to offset a portion of the inefficiencies (i.e. inefficiency means the payer has incurred more expenses because of increased resources used).

Potential Benefits to Providers

Above all, the PROMETHEUS Payment model is clinically relevant to the way physicians think when they treat patients, and is easily understood in clinical terms. Unlike 'tiering', (tournament or competitive) pay-for-performance bonuses, which are speculative for the physicians and hospitals participating in terms of whether they can be sure they will get the

proffered bonus²², the PROMETHEUS Payment model gives more certainty to the providers with respect to how much they will be paid, and an additional opportunity to be paid more for superlative performance. Moreover, the PROMETHEUS Payment principles explicitly anticipate a negotiation process between the provider and the plan around the interstices in guidelines that will reflect many choices that the evidence basis for medicine does not confront. For example, whether physicians choose in interacting with a patient – whether a visit, taking a history, performing a procedure or prescribing a drug – to have the entire encounter conducted by the physician alone, or the physician uses mid-level professionals such as nurse practitioners and physicians assistants, or whether the patient completes a form to generate a history, will influence the cost of that care, but the PROMETHEUS model is indifferent to these decisions which rest with the negotiating providers themselves.

The model has been designed explicitly to reduce onerous administrative burden on physicians. For example, in PROMETHEUS, there need be little interest on the part of the payor as to whether the visit rendered by the physician is a 99212 or a 99215. As a result, it is utterly unnecessary for the physicians to document the bullet points associated with the evaluation and management codes, which are only documented in existing systems to assure a post-payment auditor that services were rendered at the level claimed. The goal here is not to count up bullet points or time spent in a visit; rather the focus is on the salient components of a guideline and the resulting clinical outcomes for the patient. Where providers contract to render care in accordance with the guideline, there is no longer any need to get payor prior authorizations for procedures, modalities, or lengths of stay. These issues are all contemplated in the ECR itself and therefore, determining that the right care has been provided is sufficient to justify the payment made by the payor. It would even be possible in some settings to eliminate restrictive formularies since the selection of the appropriate drug will reflect either science or efficiency. The result of this burden reduction is that physicians should regain time spent today on unnecessary administrative minutia in favor of ‘time and touch’ with their patients.

We acknowledge that in the early implementation of PROMETHEUS not all of these administrative burden reductions will be realized because it is likely that not all plans in a market will adopt the system. Physicians may have to continue to document E+M codes for plans that do not participate. Faced with dual systems, some physicians may choose to continue to document the same way for all patients for convenience sake. But even from the outset, for PROMETHEUS patients there will be no prior authorizations, concurrent review or post payment audits. However the system will need to use some data to assign patients to guidelines, and populate the Scorecard. We believe the design of these elements can be managed with a clear eye on avoiding additional administrative burden. This is why much of the triggering of an ECR, as well as tracking and allocation decisions can use data in standard claims forms.

The model is intended to be carved out from existing contracts in simple amendments that would not subject these services to standard plan utilization management techniques, which are irrelevant to this process and mechanism.

PROMETHEUS drives toward real standardization of care processes to maximize efficiency within the ECR. As a result, the relevant documentation that will emerge should

²² Gosfield, “Pay For Performance: Transitional at Best,” *Managed Care*, (Jan. 2005) pp 64-69

lower fraud and abuse risks that exist both in Medicare as well as under most state insurance fraud codes. The Comprehensive Scorecard assures that services are provided as bargained for and eliminates virtually all of the fraud and abuse risks associated both with quality and false claims under the Medicare statutes.²³

An additional corollary to the PROMETHEUS Payment system is a potential reduction in malpractice liability. The engagement of patients around the guideline being used to treat them, and the transparency of the ECR, should have the effect of enhancing the doctor-patient relationship. It has been repeatedly demonstrated over the last thirty (30) years, that the most effective risk management technique to prevent malpractice exposure, bar none, is a good doctor-patient relationship.²⁴ Still further, there is now evidence that physicians who do not follow clinical practice guidelines have a six-fold increased risk of being sued for malpractice.²⁵ Because the PROMETHEUS model is predicated at its foundation on evidence based guidelines, barring negligent application of the guideline itself, this methodology guts the heart of a malpractice case which always turns on whether the provider breached the standard of care of other similarly situated providers in similar clinical circumstances.

Yet another potential provider benefit turns on the extent to which the PROMETHEUS Payment model fosters clinical integration under the antitrust rules. Under that negotiating opportunity made available by the Federal Trade Commission and the Department of Justice in their safety zone statements of 1996²⁶, otherwise competing providers who clinically integrate without financial integration²⁷ can bargain collectively for rates with plans. This will facilitate acceptance of the model since physicians who come together in furtherance of quality utilizing five specific techniques can claim to be clinically integrated.²⁸ (1) The physicians explicitly use guidelines, pathways or protocols in their delivery of services. (2) They have invested in an infrastructure (whether invested by time or money) to apply and measure the way they are acting in conformity with these guidelines; (3) they profile themselves to evaluate the extent to which they are performing in accordance with the guidelines; (4) they take action with respect to those members of their clinically integrated network who are not performing up to par; (5) they share the data with payors. If they are engaged in these activities, and the fee bargain which they seek

²³ See Gosfield, "The Doctor-Patient Relationship as the Business Care For Quality," 37 *J. Health Law* 197 (2004), and Gosfield and Reinertsen, "Doing Well by Doing Good: Improving the Business Case for Quality", (June 2003), www.uft-a.com

²⁴ See Spiegel and Kavalier, "Better Patient Communications Mean Lower Liability Expenses," *Managed Care*, (Aug 1997) <http://www.managedcaremag.com/archives/9708/9708.reducerisk.shtml>

²⁵ Ransom et al, "Reduced Medicolegal Risk by Compliance with Obstetric Clinical Pathways: A Case Control Study," 10 *Obstetrics and Gynecology* 751 (2005)

²⁶ Federal Trade Commission and Department of Justice, "Statements of Antitrust Enforcement Policy in Health Care" (Aug 1996), <http://www.ftc.gov/reports/hlth3s.htm>

²⁷ Financial integration requires the participants to be at joint financial risks through such techniques as large withholds or the merger of the competitors into a single legal entity.

²⁸ Leibenluft and Weir, "Clinical Integration: Assessing the Antitrust Risks," *HEALTH LAW HANDBOOK*, 2004 ed. West Group, pp 1-47

to make jointly is ancillary to the reason they came together, then they may jointly bargain for rates within the permitted boundaries of the antitrust laws.

Clinical integration has been held out as an opportunity for physicians in every settlement since 1996 with a physician network against which the FTC has sought to enforce for impermissible collusive price fixing²⁹. The central features of the PROMETHEUS model and the behaviors that it motivates, including explicit use of guidelines as demonstrated in the Comprehensive Scorecard, interdependency of non-integrated physicians by evaluating the quality and efficiency of referred to providers, thereby motivating otherwise competing physicians to demonstrate their quality performance in accordance with guidelines and to be more efficient in doing so, is in furtherance of the purposes of clinical integration.³⁰ Still further, otherwise competing providers could come together around specific ECRs, and defray the administrative costs (e.g. IT, report analysis, etc.) to be successful by working collaboratively in this way. Even unaffiliated hospitals can use these techniques in joint contracting, as can hospitals with physicians who are not their employees.

For hospitals, (and other facilities) PROMETHEUS Payment offers similar incentives to quality and efficiency. PROMETHEUS Payment reflects what a facility brings to bear clinically for the patient, and also offers a new basis around which to engage with physicians—those on the medical staff and those who merely refer—around quality.³¹ We expect the very explicit benefits from virtual integration will enhance these relationships.

For other providers who are more ancillary (e.g. therapy clinics, imaging facilities, pharmacies, nursing homes), ECRs can encompass, and often will, their services with the same benefits. This model often provides a basis for these more ancillary entities to team with others in delivering care, thereby bringing them into the mainstream of provider payment.

Potential Benefits to Plans

Many health plans are interested in ways to improve their market image, their relationships with providers and their HEDIS and other Scorecard results. We think PROMETHEUS Payment enhances all of these prospects by providing a payment model that directly speaks to quality in a credible, consumer relevant way, will be viewed positively by providers for the reasons noted above, and is directly aimed at improving HEDIS-type scores, many of which depend on physician behavior.

Beyond these external values, PROMETHEUS also holds the potential for lowered administrative expenses for plans by eliminating the need for prior authorizations, utilization

²⁹ Pender and Meier “Overview of FTC Antitrust Actions in Health Care Services and Products,” (Oct 2005) <http://www.ftc.gov/bc/0510hcupdate.pdf>

³⁰ Some also believe that the Performance Contingency Fund tied to the comprehensive scorecard results, combined with the opportunity for yet additional money for stellar performance qualifies as financial integration as well.

³¹ For a consideration of specific strategies to do this, see Gosfield, “In Common Cause for Quality,” HEALTH LAW HANDBOOK, 2006 ed, West Group pp. 175-220.

management, post-payment claims, efficiency profiling and P4P for care provided under ECRs. In substitution, the Comprehensive Scorecard manages the same issues. Still further, by the use of the vendor created Engine to establish the ECRs, track their implementation, allocate dollars across providers, and populate and create the Scorecard—we are hoping to make the implementation of PROMETHEUS easy and as close to “plug and play” for plans as possible. Using service bureaus to manage the data which is the basis for scores and payment also lowers burden to the plan. In addition, for the care paid for by ECRs, the payment model offers certainty in payment amounts permitting more secure and accurate budgeting.

General Limitations

Although PROMETHEUS has much potential to rectify many of the chronic distortions of the current reimbursement system, it is not being proposed as a panacea for American health care, and it does have limitations. These limitations will be rigorously tested as part of the pilot experiments.

1. Clinical practice guidelines are not perfect

The translation process of selecting appropriate guidelines can be hampered by the fact that sometimes published guidelines conflict with each other, the science is not robustly established or the interaction among guidelines for different conditions present in patients as co-morbidities is not well understood. Moreover, selecting ECRs and basing them on guidelines that are too broad or too narrow could result in payments that, if too broad, reintroduce the problems of capitation, and if too narrow, might perpetuate fragmentation. These problems can be attenuated by ensuring a careful winnowing process in selecting appropriate guidelines, submitting selected guidelines to strenuous external review, and testing base ECR amounts with normal variations to assure clinical credibility, discarding ECRs that either present persistent boundary problems or whose guidelines are based in questionable science. We also anticipate that many cycles of feedback will consistently improve the match between guidelines and payment. Just as important, ECRs will have to be continuously updated to account for new evidence and the design team will establish a rigorous process to monitor the emergence of new evidence, evaluate it and determine the need to incorporate it into the ECR.

2. Determining correct ECR costs will be difficult

When creating ECR budgets, determining the correct balance of services and their unit costs can be marred by improper analysis of historical data, coding errors, and price distortions embedded in claims data that reflect problems of under-, overuse and even misuse. At this stage of the process, wedding guidelines to services and longitudinal costs will not be a forthright exercise. The possibility of creating ECR base payments that do not accurately mirror the actual costs of providing care is admittedly present. It is also possible that risk-adjustments might not be properly calibrated, giving significant incentives to game ECR budgets, especially through up-coding or case avoidance. This is why implementing pilots before attempting large-scale adoption is so important. Not only will uncomplicated ECRs and their variations require careful analysis, but the risk

adjustment equations will also depend on validation from pilot experience and ongoing operations. This places even more emphasis on integrating data captured from electronic health records to counterbalance the ambiguities and lack of clinical granularity in claims data. In addition, new clinical innovations and technology appear in the market continuously and their impact on the ECRs will have to be determined in order to avoid creating situations where patients may be denied needed innovations.

3. Operation of ECR Engines may be prone to application and system failures

The Engine functions described in this paper are certainly complex. They present significant potential to fail. If, for instance, the Tracker Engine (which establishes, monitors, and allocates costs within the ECR) and ECR plan implementation are not synchronized, cases could trigger out of time and double payments could occur. The Tracker may miss case triggers and breakers, mis-assign ECRs, lose track of patients leaking out of triggered ECRs, and inappropriately apply case breakers or conclusions. In addition, most plan claims transaction systems have trouble enough paying regular network billing submissions, let alone dealing with these innovations. The inaccuracies in provider claim coding and the everyday snafus that occur as plans attempt to reimburse huge volumes of claims could easily create problems for the Tracker Engine. The Tracker Engine will have to address questionable coding problems. The Tracker will have to be able to manage complex opportunities for misallocations and will require constant review, adjustment, and reprogramming.

4. Improper allocation of ECR budgets

Another limiting factor, especially in the first trial applications, will be the possibility of ECR budgets being improperly parceled out to the wrong provider and provider types. And, as with all grouping technologies, the problem of incorrect service attribution will have to be constantly scrutinized. This is especially true when patients change providers. Changes in technology or the average rate of predicted complications will also have to be anticipated. But these can all be managed by monitoring provider satisfaction with service attribution and payment distributions and installing a rigorous auditing process to monitor ECR budget allocations.

Even if the ECR budgets are allocated properly, globally pricing a guideline does not solve the problem of preference sensitive conditions, where, for instance, a patient with low back pain may properly be treated either with conservative care or surgery. This is because availability of ECRs for both conservative and surgical pathways may raise too many pathway issues that are very difficult to predict and introduce un-manageable insurance risk into the budget. The solution is to allow the ECR budget to modify as conditions require, but to base those modifications on clinical indicators and patient feedback, both fed into the Comprehensive Scorecard where economic incentives can be reasonably implemented for preference-sensitive conditions. In particular, the Scorecard should weight provider use of shared clinical decision-making tools and procedure rates per 1000 compared to normative rates in preference-sensitive ECRs.

5. Inability to achieve critical mass

One of the biggest worries associated with PROMETHEUS is whether there will be enough health care dollars and patients to make it viable for interested providers. If the participating plans' ECR payments represent insignificant volumes of care or the incentives are not enough to stimulate improvement, the program will never get off the ground. If providers have to maintain parallel administrative systems, the full value of burden reduction will never be realized. This means pilots will have to be selected carefully, and positive results used to encourage broader implementation. In addition, even with a sensitive risk-adjustment method, blending co-morbid conditions into a base ECR will still require a minimum volume of patients per provider. This is less of a problem with large plans contracting with IDs than it is with smaller plans contracting with smaller practices.

6. Comprehensive Scorecard and outcomes problems

One of the major objectives of PROMETHEUS is to overcome delivery system fragmentation through virtual integration, and the Comprehensive Scorecard is vital to this objective. However, it must be noted that 1) if provider scores cannot be reliably related to patient outcomes, rewards may be improperly distributed; 2) if providers who participate cannot demonstrate improve outcomes, the credibility of ECR payments will be compromised; and 3) if consumers and providers regard Scorecard distributions and ECR payments as just another cost-cutting scheme, cynicism will undermine PROMETHEUS rollout. As with the potential problems associated with the new Engine technologies, Scorecard limitations can be overcome with constant monitoring of the relationship between provider scores and patient outcomes, reviewing provider satisfaction with incentives and their affect on provider behavior, and keeping a watchful eye on market responses to PROMETHEUS. In addition, specific allowances will have to be made to account for known standard gaps in patient compliance to significantly limit the potential for providers to be penalized because patients fail to comply with recommended treatments. Similarly, a White Paper published in 2005 by the Leapfrog Group and Bridges To Excellence indicated that allowances should be made to hospitals that have specific social missions to significantly limit the potential to misclassify them as inefficient.

7. Providers will game the system.

All incentives can produce perverse behavior at their extremes. There is a possibility that some providers may "game" the PROMETHEUS system. We think there are three basic ways to do this: (a) by claiming a diagnosis to trigger an ECR which is not really the patient's condition; (b) by claiming severity factors to increase payment within the ECR; (c) by asserting contraindications, patient preference or other reasons not to deliver all the care the ECR contemplates thereby increasing margins. We believe that the Scorecard will be able to, and should be designed to, identify some of these efforts. We believe those choosing to pilot PROMETHEUS will have every reason not to game the process

but to work hard to make it succeed, while identifying potential system vulnerabilities which can help refine the design to safeguard against gaming.

Implications and Concerns for Health Plans

There are two main concerns that health plans have raised and that the pilot demonstrations will have to rigorously demonstrate: (1) the need to achieve budget neutrality in the experiment, and (2) the need to maintain operational simplicity. Both of these are significant challenges for the design team, but imperative if the program is to be successful.

Budget neutrality, using the same definition that Medicare uses, means that paying providers through ECRs would not cost more than paying them in traditional arrangements. The modeling of the ECRs will determine which combination of ECRs should be deployed in the pilot phase to achieve budget neutrality. For example, early analyses show that an ECR for back pain would result in lower overall costs than are experienced with today's payment system. Conversely, asthma ECRs may result in slightly higher costs than are experienced today. Using disease prevalence rates and the differential in total costs will help tailor the package of ECRs for the pilots.

The current solution to achieve operational simplicity is to enable plans to subscribe to a service bureau that will host, maintain and manage the PROMETHEUS Engine. The design team anticipates that there will be more than one service bureau to choose from, thus creating choice and competition for this service in the market. The plans will be able to link with a service bureau and rely on that organization to manage the complex accounting and Scorecarding functions that are intrinsic to the design. However, there will be some direct and indirect costs to be borne by the plan. The direct costs are mainly the fees charged by the service bureaus and the costs incurred to link to the PROMETHEUS Engine. Some indirect costs include internal IT work to accommodate the PROMETHEUS design and the disruption that any change in processes causes to an organization.

Other concerns of importance to plans, and that PROMETHEUS explicitly addresses, include the need to have a system that will improve the quality of care in their service area, the needed buy-in of the provider community and the ability to engage plan members. With respect to the latter, plans will be able to use the very product of PROMETHEUS – the evidence-based case rates – to inform plan members about the relative expected cost of care at the onset of an illness or a disease. This information is all the more critical in plan benefits that are tied to health savings accounts where high deductibles and out of pocket expenses are expected and the need to plan for those expenses is especially great.

Some plans are concerned that with the emphasis on transparency throughout the PROMETHEUS system, publication of their prices could violate non-disclosure agreements they have with some of their providers. We believe that the bundles created through ECRs actually obscure discrete fee schedules since fee schedules are not relevant to this payment model. We expect that plans will continue to be able to negotiate and compete based on obtaining favorable pricing from providers. Through transparency, the ECRs can become an important way to

disclose relative pricing information to consumers, helping them understand the potential cost of the care they will incur by getting care from one provider rather than another.

Implications and Concerns for Providers

Because of the diversity of provider configurations and types in the market, the design team believed it was extremely important to garner responses and comments from at least some of that constituency in preparing this White Paper. At Appendix B there is a list of national organizations, provider groups, and consultants who provided comments and criticisms with regard to PROMETHEUS Payment concepts. Although initial reactions were universally supportive of a clinically relevant payment model that has the potential to lower administrative burden over time, there were several themes that were common among the responding providers. Many of these are captured in even more detail in the Frequently Asked Questions (FAQs) set forth in Appendix C.

The most frequently cited concern was anxiety over the complexity of the system. Some of this concern reflects the unknowns associated with Engines that are not yet developed. The design team expects to be vigilant with regard to the values articulated in the model and some of the unknowns will become clear in the fullness of time. That said, there is no question that PROMETHEUS Payment is complex. Simplistic responses to payment reform unfortunately do not lend themselves to the complex goals of high quality, clinically relevant payment, transparent reporting, with actionable real-time information to all stakeholders. There is no way to whitewash the difficulties that will undoubtedly unfold in this model. Nonetheless, we believe that any change for the better will require some struggle in the transition periods.

A second concern is that the system requires investment in significant information technology infrastructure. We believe that PROMETHEUS can work more easily on an electronic foundation, but we believe that because it will be implemented incrementally, that very expensive systems need not characterize initial efforts at implementation.

Many commenters and providers are concerned that the system is designed to favor fully integrated delivery systems. As indicated above, these systems are already constituted to manage some of the more challenging operational features of PROMETHEUS; but through “virtual integration”, clinical integration among otherwise competing providers allowing economies of scale, and payment that benefits those who pay heed to their referral relationships, we believe that the model is applicable for all types and sizes of provider entities. This will have to be evaluated in the pilots. The availability of a fee for service payment model also is intended to facilitate adoption by smaller providers.

There has been concern that clinical practice guidelines are flawed as a predicate for payment since they do not always reflect scientific evidence and are variable in the strength of their evidence. In addition, there is some skepticism because CPGs are idealized statements and do not lend themselves to practical application³². Because we cannot price for outcomes alone,

³²Brush et al., "Integrating Clinical Practice Guidelines Into The Routine of Everyday Practice," 4 Critical Pathways in Cardiology 161 (Sept. 2005)

we believe that clinical practice guidelines, even those rigorously constructed around a consensus base which reflect the eight attributes of good clinical practice guidelines articulated by the Institute of Medicine in 1992, provide a rational and more clinically relevant basis for payment than what is used today. We also believe that this use of CPGs can motivate improved development of better CPGs.

Providers are concerned that patients will not track easily to a CPG. Although some pilots will evaluate ECRs for simple single conditions, we are hopeful that the risk stratification in the ECR models can accommodate the co-morbidities of typical patients. We anticipate our pilots to evaluate some chronic conditions that will test this judgment.

Many providers reflected the difficulties and disappointments in failed efforts of other plan sponsored payment models. A significant number cited plans as not trustworthy to manage these mechanisms. While the design of PROMETHEUS is explicitly founded upon a collaborative, negotiated model of payment agreed to by plans and providers, use of the service bureaus which will lower administrative burdens to plans can also enhance the credibility of the process by having data managed through more trusted third parties who themselves do not directly pay claims.

Another critical concern was that the Engine could be a black box and therefore neither credible nor trusted by providers. Transparency is a bedrock principle of PROMETHEUS Payment; and while certified vendors will own their own intellectual property which they may license, the core value of PROMETHEUS Payment is that all aspects of the model and its mechanisms are transparent. The design team will work diligently to maintain this value in implementation.

Criteria to Select Sites for Pilot Testing

To determine the feasibility and functionality of PROMETHEUS and to guide design and operational improvements prior to rollout of the full system, pilot tests will be performed at selected sites. Evaluation of PROMETHEUS implementation in a fragmented delivery system is especially important because virtual integration is likely difficult but will be required for widespread implementation of the system. Obtaining adequate numbers of participating patients to engage the interest of individual providers and to support analyses of the effects of the system also is of critical importance. This means engagement by significant health plans in a market is essential as well. The design team and, in particular, another team of evaluation experts will select sites with different characteristics to test the differential impact of PROMETHEUS'. In general we will seek to pilot in an "advanced" market, an "intermediate" market, and a "basic" market.

	Basic	Intermediate	Advanced
Delivery System	Mostly fragmented	Presence of multi-specialty groups and/or IPAs	Presence of fully integrated systems
Current use of capitation	None	Some	Some
Ability to manage	Little or none	Moderate	Moderate to high

case rates			
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There are a number of factors we believe will offer useful bases on which to differentiate pilots. These are not to be exclusionary but rather factors or markers to be evaluated for the reasons set forth below.

1. Large concentrated medically diverse population

A measure of the health status, variation in health conditions, and scope of medical services utilized in the current market. This will enhance the chance to measure implementation of multiple ECRs at once.

2. Stable patient population

A measure of population migration in and out of the state over the past year. Stability will make evaluation easier.

3. Large, active employers/business coalition

Whether in the defined market there are sufficient purchasers' of health benefits for a combined count of at least 50,000 covered lives or 8%-10% of the local population. Such purchasers typically are Fortune 100 companies.

4. Large market share of willing plans

The larger the market share of a willing plan, the more significant the pilot will be because the impact for all stakeholders will be greater and more meaningful. Large market share is at least 30% of the total spent between employers and health plans in the market.

5. Willingness of local provider leaders

The prevalence of active quality programs in the market may reflect how local physicians traditionally react to different payment models, their willingness to share data and work collaboratively. It is an indication of how easily local provider leaders would adapt to a new payment model and how willing they would be to voluntarily participate in such an effort.

6. Experience with payment innovation

Whether plans have implemented pay for performance programs, case rates, episodes of care, or other departures from basic fee for service or capitation can affect potential pilot acceptance. Successful experiments likely mean the market is more likely to adopt further innovation. Failed initiatives may create suspicion and less acceptance of more change. Even if no other initiatives have been attempted, there may be a real hunger for something new or real and resistance to innovation.

7. Presence of local business groups on health

Where local healthcare business coalitions in which employers are engaged and actively participating can provide additional information on market experience with and acceptance of innovation.

8. *Other major healthcare market initiatives*

Where other major healthcare market initiatives include any legislation or payment reform programs pay for performance, RHIOs, etc. speak both to acceptance of innovation but also potentially to market saturation for a program like PROMETHEUS.

9. *Dominant academic/medical centers or other large providers in the market*

Where large teaching facilities or other major providers dominate in a local market, the potential impact of PROMETHEUS may be blunted if they do not participate or enhanced if they do.

10. *Existence of integrated delivery systems*

The existence and experience of the local market with integrated delivery systems, virtual or actual, speaks to an important application of PROMETHEUS.

11. *Familiarity with capitation*

Whether, how, with whom, and the degree of satisfaction with capitation models may be important.

12. *Current prevalence of case rates* can be significant for the implementation of ECRs. We are encouraging willing candidates to apply to become pilot sites, explaining how they can help us learn more.

Intellectual Property

The design group seeks to encourage the widespread adoption and application of PROMETHEUS Payment. However we will seek to protect the intellectual property of the work to date and the ongoing work that will continue to ensure that its application in the market is consistent with the design elements outlined in this Paper. Therefore, this White Paper has been copyrighted, although it is widely available. The name “PROMETHEUS Payment” is being trademarked (as is the description “Provider payment Reform for Outcomes, Margins, Evidence, Transparency, Hassle-reduction, Excellence, Understandability and Sustainability”). This means that no vendor will be able to commercialize the PROMETHEUS system without approval. The point is to protect the intellectual integrity of the processes and mechanisms. The quality of the services associated with the trademarks must be safeguarded to reflect the totality of the concepts that define what PROMETHEUS stands for.

Any commercial applications of the trademarks and intellectual property associated with PROMETHEUS will require licensing. For example, a software company could not develop a Comprehensive Scorecard and say: “This product is PROMETHEUS-compliant” without obtaining a license to do so. To the extent that a plan were to market itself as a PROMETHEUS participating plan, it would have to be careful to adhere to the PROMETHEUS concepts and design or run afoul of the trademark protections.

Conclusion

In Greek mythology Prometheus brought understanding and light to humans, thus propelling them into the age of reason. Our version of PROMETHEUS carries the hope of bringing new light and understanding to payment systems and propelling quality health care far into this new millennium.

There is much to be learned about the principles, concepts and theory of PROMETHEUS Payment. The design group is optimistic about the enormous potential it seems to offer but is mindful of the need to move carefully in order to learn from practical implementation and refinement. We are mindful, in particular, of the potential for many critical process failures and the significant difficulties of delivering ECRs in a fragmented fee-for-service environment. We understand that early adopters will encounter political and operational barriers from which we all can learn. Being humbled by past failures, designing processes and systems with tight controls, and establishing a rigorous evaluation plan are the keys to success we plan to use in the pilots. We are hopeful that the conceptual appeal of PROMETHEUS Payment will prove sufficiently alluring that well motivated plans and providers will step up to join us in these early steps to a new and better payment system that will improve care for patients and the working environment for those who treat them and pay for that care.

Appendix A

Design Team

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Appendix C

FAQs

Design:

1. Doesn't this really only favor big integrated delivery systems?
 - Integrated delivery systems could potentially do well under PROMETHEUS, but only if they can truly demonstrate better quality and cost of care than other forms of provider groupings. The program's design, including a fee for service component, can favor small, nimble and advanced "virtual" groups of providers that come together to manage a patient's care. It also can be used by otherwise competing providers who gain economies of scale through clinical integration
2. Won't the designers of the "Engines" insist that their information be held secret in black boxes?
 - They may, but not if they want to be officially approved by PROMETHEUS. A core principle of the program is to be completely transparent in all processes so that consumers and providers can understand all the underlying mechanics of the program.
3. Most patients won't fit neatly into a CPG disease category so how will ECRs account for that?
 - ECRs are designed as homogenous clinical groupings that are severity adjusted to account for patient co-morbidities. In addition, multiple ECRs can be opened for a single patient to the extent the patient has distinct conditions or needs distinct procedures. Patients that are truly complex will not be included under PROMETHEUS until enough is known about how to create ECRs for these highly complex patients.
4. Clinical practice guidelines are not perfect and often ambiguous. Most are not evidence based. How can this be a reasonable basis to pay for healthcare?
 - CPGs will be used as a starting point to construct the ECRs, not to micro-manage how care is delivered. In many cases CPGs are widely accepted and uncontroversial and those will certainly be the initial foci of PROMETHEUS. The alternative to using CPGs would be to use historical claims data that reflect current utilization patterns, have no basis whatsoever on evidence of what constitutes good care, and include significant distortions present in the delivery of care today.
5. Why don't you design a system that simply pays for an outcome?

- Because we can't price on outcome alone. Paying for outcomes is an integral part of PROMETHEUS since outcomes are included in the Comprehensive Scorecard. The question answered by PROMETHEUS is what the payment should be based on to begin with. The clinical processes and outcomes included in the Scorecard act as a beacon on which provider attention is fixed, but with the confidence that the amount of money paid for delivering those outcomes is fair and equitable.

6. Isn't this just contact capitation in disguise?

- Capitation has nothing to do with clinical processes of care. It is an actuarial rate that transfers insurance risk from plans to providers by taking a very broad-based assumption of cost of care across a wide population. Capitation, contact or otherwise, imputes that cost as an average cost for any provider taking the capitated rate. In capitation, providers take the risk that they may have a sicker patient panel than average or that their condition or disease mix can be more unfavorable in terms of resource use per patient than the average. PROMETHEUS explicitly avoids this problem by (1) constructing the payment rates in a way that reflects the cost of what is clinically relevant to the patient's condition, with the appropriate differential in resource use by condition, disease or procedure, and (2) adjusting those ECRs to account for the relative severity of the patients in the panel.

7. Isn't this like redesigning RBRVS?

- No, because PROMETHEUS is not a fee schedule that institutionalizes the fragmentation of care. To the contrary, by creating clinically homogenous case rates that are linked to a Scorecard, the purpose is to integrate care around the patient's true clinical needs rather than establishing arbitrary valuations of micro-portions of care. In addition, the type of "cost accounting" in RBRVS had nothing to do with actual cost of the resources necessary to deliver clinically mandated high quality care.

8. All healthcare is local. Isn't this a drive towards a national defined payment rate?

- No, for two reasons: (1) ECRs will reflect regional price adjustments and regional practice patterns; (2) ECRs are subject to local negotiation. It is important to note, however, that one of PROMETHEUS's objectives is to ensure that all patients get high quality care and to reduce the current unjustifiable significant variations in quality and cost.

9. PHOs didn't work and physicians haven't collaborated outside their group practices. Won't this approach just lead to fights over money among providers?

- A bedrock principle of PROMETHEUS is that no one holds the money for a provider unless he chooses that approach. Many of the PHO disputes arose because the hospital drove the negotiations, the PHO held the physicians' money

for disbursement, and there were no explicit bases to parse out whose money should be whose. Allocation of ECRs turns on who renders which part of the CPG, assigned in advance. Still further, because of the impact of the Scorecard, and that 30% of a provider's scores center on the behavior of other providers treating the patient, the winners will be those who collaborate in the patient's best interest.

10. Aren't CPGs all tainted because they are paid for by industry?

- There is certainly evidence that a significant portion of the financing for drug related guidelines comes from drug manufacturers.³³ While it is true that the pharmaceutical industry has funded the research of many of those who author CPGs, that does not mean the science within them is itself corrupted. Rather, it means that it is important to evaluate the legitimacy of the guideline itself and the science upon which it relies before adopting it. These factors will be taken into account in selecting guidelines to form the basis for ECRs. There are many guidelines that are available and there is a methodology by which they can be evaluated with respect to the quality of the science within them³⁴.

11. Doesn't this give physicians insurance risk?

- No. ECRs are specifically designed to avoid giving insurance risk to providers. (1) The base for payment is established by pricing the quantity and range of services recommended by guidelines; (2) ECRs are also adjusted to account for normal clinical variation (the difference in reaction of patients to certain medications and treatments); and (3) they are severity adjusted. Insurance risk is a probability-based risk that assumes that patients are average on average.

12. CPGs have never really been used for much. How can you base a whole payment system on them?

- In all systems to date, CPGs have not been the bedrock for payment as they are here, so their use has always been somewhat tangential to health care operations. Standardizing care processes to science is now understood both to enhance quality and efficiency. It is unfortunate that guidelines are not used more systematically given the recent findings that many patients do not get recommended care. Basing ECRs on guidelines is a way of making sure that the negotiated price for delivering good care is based on a reasonable assumption of the level of services that are required to deliver good care.

³³ Bakalar, "Potential Conflict Cited in Process for New Drugs", New York Times, Oct. 25, 2005

³⁴ See Institute of Medicine, GUIDELINES FOR CLINICAL PRACTICE: FROM DEVELOPMENT TO USE, Field and Lohr eds (1992), "A Provisional Instrument for Assessing Clinical Practice Guidelines", pp 346-410 designed to elucidate to what extent a specific GUIDELINE manifests the eight attributes of good Guidelines articulated in that study. Still further, the AHRQ Guidelines Clearinghouse does provide some comparative data on Guidelines on some of these issues. See www.guideline.gov

13. Who decides what configurations of providers may participate?

- The configuration of providers into teams of collaborative entities is entirely within the discretion of the providers. Physician groups may join with hospitals or therapy providers or imaging facilities or anybody else they think it would be worthwhile to collaborate with to achieve better results for patients. There is no obligation that these aggregations of providers accept money together but they can if they want to. No one holds the money of any provider who does not choose to be paid that way and providers are entirely free to self determine their organizational relationships and referral relationships.

14. This system will only benefit providers who are doing well already. Will it reward relative improvement?

- Yes, the Performance Contingency Fund is specifically tailored to reward improvement over a minimum threshold. Providers starting below the minimum will have an incentive to reach that minimum and then a constant incentive to move up the scale to the maximum.

15. How will PROMETHEUS account for payment for care for patients in vulnerable populations who need more resources than those in a CPG?

- There are two ways in which ECRs will be modified to account for facilities that have a specific mission and for providers that, in general, see sicker patients. First, ECRs will be severity adjusted so that providers seeing vulnerable populations (or populations with more risk-factors and relatively sicker) will get higher ECRs to manage those patients. Second, all facility costs associated to facilities that have a specific mission (e.g. teaching, disproportionate share) will be adjusted to account for that mission.

16. Won't PROMETHEUS ultimately really just exacerbate cost inflation since it is not a cost control technique?

- We know we have major problems of misuse, overuse, and underuse in this country. We also know that Americans are getting only fifty-five percent of what the evidence says they should be receiving as care³⁵. This means that despite rising healthcare costs, there is still a substantial volume of appropriate and necessary healthcare services which are not being delivered. We believe that through PROMETHEUS and the application of guidelines to drive payment, for participating providers, overuse and misuse should be reduced. We do not know whether this resulting correction will result in a net decrease in healthcare expenditures. Cost control alone cannot assure the delivery of appropriate quality in accordance with science. We believe that in PROMETHEUS, the

³⁵ McGlynn, et. al, "The Quality of Health care Delivered to Adults in the United States," 548 NEJM 2635 (2003)

Comprehensive Scorecard tied to the ECR and the Performance Contingency Funds will act as a regulating agent, explicitly encouraging the efficient use of resources to deliver the best possible outcome.

17. This model depends on the use of evidence based medicine as the basis for delivering health care. While this is laudable, there are many common treatments in use today which have not been subjected to rigorous assessment of their efficacy. Would all of these treatments be denied payment?

- The purpose of PROMETHEUS Payment is to ground payment on a foundation of the best science available. While true evidence based guidelines are the preferred choice, good clinical practice guidelines based on consensus are also eligible for inclusion as a basis for payment, even though their evidence base may not have been subjected to randomized controlled clinical trials or rigorous assessment.

Scorecard:

18. How much will the Scorecard weight outcomes as opposed to compliance with guidelines since what happens to the patient is more important than whether the guidelines were followed?

- Both aspects of care are measured. The Scorecard is not designed to force providers to strictly adhere to guidelines; but the salient elements of the CPG that define the basis for payment will be measured along with outcomes.

19. How will patient compliance be accounted for?

- Patient non-compliance is accounted for in the calibration of the outcomes measures. For example, it is not reasonable to expect that all patients with diabetes would have Hba1C levels below 7. The measurement system can create bands around a measure to appropriately account for this issue.

20. Is efficiency measured only with regard to who is referred to or also with regard to who refers to the provider?

- Both. While an argument can be made that providers should only be held responsible for the downstream care delivered, the design team feels that one of the overriding principles of PROMETHEUS is to encourage co-responsibility across all providers that care for a patient, thus encouraging clinical integration around the patient and progressively eliminating the current fragmentation of care. That said, initially the Scorecard will focus on downstream care rather than upstream.

21. What is appealable?

- Issues which can be appealed through a to be designed process would primarily be those that affect the amount of payment to a provider. Examples would include the allocation of the contingency fund, errors in the data populating the scorecard, denial of a risk adjusted increase in the ECR; the denial of the triggering of an ECR or a challenge to the determination that the ECR has been broken or not broken. Based on the pilots, we likely will determine other issues that should be subject to review and reconsideration (appeal).

22. What will be the process for determining the appropriate weights for the measures?

- All the measures on the Scorecard will be selected from nationally accepted sources and authorities. Each of these measures will be weighted by a panel that is assigned to that specific task. That process, the weights and measures will be transparent and made available to all.

Payment:

23. How will the physicians be paid if what is in the guideline is contraindicated or there are other valid reasons not to provide it?

- Once an ECR has been negotiated, a physician (or any care provider) is free to manage the patient in any way they deem it to be in the patient's best interest. The validity of the approach will be determined through the Comprehensive Scorecard. If the physician does not deliver what he bargained to do, and his score as a result lowers his payment, but the intervention was contraindicated, this will be appealable.

24. If this system pays the cost of delivering care, then doesn't the withhold automatically mean that the provider is losing money?

- No, because ECRs are constructed with an explicit profit margin. To the extent the provider is charged on the Contingency Funds for failure to provide some element of care, then he didn't incur that expense, so he loses nothing. On the other hand, providers who deliver excellence will, in fact, receive more than the ECR, and therefore generate even more significant profit margins.

25. How is integration of non-participating providers to be handled?

- Non-participating providers continue to be paid under current payment methods. The cost and quality of the care they deliver is included in 30% of the Comprehensive Scorecard. Participating providers actually stand to make significant profit margins while non-participating providers will only receive their regularly contracted fee schedules.

26. Must a provider who has indicated a willingness to participate be paid this way for all patients with that diagnosis?

- Yes. Once a provider decides to participate in PROMETHEUS, all patients with the condition in the ECRs will fall under its scope. This is to avoid the potential for cherry-picking patients. Providers are protected from insurance risk through two mechanisms: (1) ECRs are severity adjusted, and (2) ECRs have fail-safe “breakers” that insulate the provider in the event a patient turns into a “catastrophic” case.

27. How will this system take into account ancillary and mid-level providers such as physical therapists, nurse practitioners, nutritionists and dieticians?

- All care along the normal continuum is explicitly included in the ECR and all providers can participate in PROMETHEUS.

28. How will co-pays work?

- Co-pays, co-insurance, deductibles and any other benefit plan provisions will continue to apply. Plans which adopt PROMETHEUS will decide how to make co-pays consistent with PROMETHEUS. The design team will explicitly encourage plans to experiment with these benefit design provisions to encourage plan members to seek care preferentially with top performing providers.

29. How do you get paid for care before the diagnosis is established?

- Prior to an ECR being triggered, care is paid as usual.

30. What happens when the patient presents for a visit that is part of the ECR and reports a symptom that is unrelated to the ECR? (E.g. a patient being monitored for diabetes presents with a respiratory infection?)

- The services associated to the unrelated symptom would be excluded from the ECR and paid for separately

31. How will this result in more money to physicians?

- Since ECRs are global case rates that cover all care associated with a condition, disease or procedure, and also have an explicit profit margin built, physicians who manage care well keep the difference between the actual cost of care and the case rate. Moreover, while physicians who over-utilize resources may experience revenues reductions, changing their practice to reflect CPG based care will lower their expenses and increase their margins. This is an important PROMETHEUS goal.

32. Claims data only reflects payment to do something. How can an ECR take into account the value, in quality and efficiency terms, of not doing something?

- ECRs are constructed using CPGs as a foundation and claims data are only used to price services that are recommended as part of the CPG. For example, watchful waiting—a form of not doing something else—requires doctor-patient interaction to be effective. This will be paid for. In addition, the payment of remainders from unallocated Quality Contingency Funds will further reward the top performing quartile of providers who may well be doing less than their peers while achieving better results for their patients.

33. Who will determine what it costs to provide the care in the CPG?

- In the beginning the process of converting CPGs to ECRs follows three steps: (1) determine the level of services that are recommended by guidelines; (2) assess an expected normal clinical variation above the set of services recommended by the guidelines; and (3) apply a unit price to those services to construct the base ECR. ECRs are then adjusted to include an explicit profit margin, and finally, they are severity adjusted. The analytical work that has to be done to accomplish those three steps is currently a cooperative effort between the design team and outside organizations. After this process, plans and providers are expected to negotiate around costs that may not be captured in these three steps. Eventually, we hope more sophisticated provider cost accounting to reflect truly the resource costs to render clinically relevant care will be developed to provide a better basis to negotiate ECRs.

34. How is clinician time taken into account in determining cost?

- Today, only FFS payment attempts to account for physician time, and that accounting is embedded in all CPT codes, but also especially in visits. In PROMETHEUS, initially, office visits, the cost of medication, and ancillary services are priced using historical claims data. Over time, it is our expectation that providers will establish their own internal cost-accounting processes and will be able to negotiate ECRs with a full understanding of what it actually costs them to deliver the care including clinician time. As a starting point, the current price of office visits and any other care provided will be determined using claims data.

35. What happens when a new medical innovation is introduced in the market? Will ECRs have to be continuously re-calibrated?

- Yes, ECRs will have to be recalibrated regularly (at least once a year) to account for two factors (1) introduction of new evidence, whether linked to a new technology or not; and (2) the actual experience in the market which will lead us to observe the actual costs and quality of top performing teams.

36. Won't basing payment on CPGs stagnate innovation? What happens when new evidence or experience suggests that the current guidelines are no longer suitable? What will be the process to evaluate that evidence or experience?

- See answer above. In addition, the design team will establish a formal process to evaluate new evidence or changes in guidelines will be established and made transparent to all by the design team. Any changes will be reflected in the ECRs as soon as possible.

37. How can claims data used in the first year to define ECRs accurately reflect the “cost” of care?

- At the outset, unfortunately, neither plans nor providers have credible, let alone accurate, data regarding the actual costs associated with delivering specified clinical care as articulated in a CPG. Consequently, in order to begin a new payment process, some basis to equitably price a guideline must be used. By looking to national claims data bases to determine the current claims payment patterns for providers who render care consistent with guidelines, (to the extent that it can be determined) and adjusting that both for normal clinical variation and risk, and then adding a profit margin on top, the design team hopes to approximate an equitable payment rate reflective of the services that should be provided according to the best science available. This pricing will, admittedly, not reflect true costs in an idealized frame of reference. We are encouraging providers and others to work on the problem of developing more sophisticated techniques of cost accounting so as to enhance the legitimacy of the ECR pricing exercise, in the future.

Implementation:

38. What will it cost physicians to do this?

- The cost to providers for participating in PROMETHEUS will largely depend on their ability to efficiently and effectively manage the care of their patients, communicate with other care givers involved in the patient’s care, follow the progress of those patients and succeed on a comprehensive set of performance measures. Clearly, providers need robust clinical information systems to accomplish these tasks on a large number of patients. Some estimates show the cost of these systems and the re-Engineering of a practice to truly excel at patient care can be as high as \$50,000 for a practice of three to five physicians, but this is widely variable and not specifically reflective of PROMETHEUS. In addition, physicians who otherwise compete, but engage in clinical integration, can realize economies of scale on these issues.

39. Who will manage the data and to whom is it available?

- There will be service bureaus established that will act as the mechanisms to apply the Engines to the data that populates the scorecard and determines the payment. Payment will be handled directly by the plans themselves. As close to real time reports as possible will be generated by the Engines to produce actionable information on which providers can improve their behavior to enhance their

results in the Scorecard. Data regarding other providers participating in the program will be made available so that providers can make effective referral decisions as well as decisions regarding their preferred collaborators in the program. Data regarding performance of providers and plans will be made available to consumers, employers, and patients. Transparency is a fundamental premise of PROMETHEUS.

40. Who selects the pilots?

- Pilots will be selected by the design team taking into account at least twelve factors we believe are relevant both to successful implementation, meaningful results from which we can learn and likelihood of sustainability of the work.

41. Doesn't this require massive investment in infrastructure and technology?

- Clearly, having a clinical information system would enhance a provider's ability to manage patients within ECRs. However, providers that focus on a discrete ECR (e.g. diabetes) could organize a part of their practice to manage those patients without necessitating a significant investment in infrastructure or technology.

42. How can this possibly result in administrative burden reduction when most physicians will be rendering care in dual track systems, some on an ECR and others not?

- In the beginning the principal burden reductions for providers treating patients treated on ECRs will be no prior authorizations, no concurrent authorization review, no post-payment claims audits, and no certificates of medical necessity. Letting physicians practice without formularies is also possible since the CPGs identify appropriate drugs. Whether physicians choose to continue to document PROMETHEUS Payment visits consistent with E+ M bullets is their decision. That said, the transition to this new approach will require administrative changes and new and different administrative burdens. Once PROMETHEUS is implemented though, those burdens will ease. If all relevant payors do not participate though, there will be a need to manage multiple administrative processes.

43. How will regional differences in utilization patterns be accounted for or addressed in this model?

- Initially these patterns will be reflected in the ECR construct. However, over time, the design team expects that these differences will disappear.

44. Won't plans have to pay exorbitant fees to a small group of approved vendors?

- The PROMETHEUS Engine specifications will be in the public domain and any plan can build their own version without using the PROMETHEUS-approved

vendors. In addition, the design team will carefully monitor the vendors to ensure that they charge reasonable fees that cover the expense of running the engine and compensate the vendors for their investment in building the engine, but not much more.

45. Physicians are not trained to negotiate; won't this require a cadre of negotiators who will skim money from providers?

- Providers are under no obligation to designate a third party to intervene for them. They can continue to be paid by their current plans and still benefit from full participation in PROMETHEUS. If they choose to use a third party to negotiate, that is up to them.

46. Won't this program require a lot of legal infrastructure to make it real?

- Actually, we believe that relatively simple contract amendments establishing a carve out for the negotiated ECRs and protecting providers from the inconsistent medical management programs (e.g. profiling, utilization review, prior authorizations, etc.) for the rest of their business are all that is necessary. No new legal structures are necessary to make PROMETHEUS relationships work. Certain groups of providers may choose to formally configure themselves into a network but there is no obligation that this happen. Still further, throughout the country, both loose and tight configurations of providers have already come together for other purposes (e.g. GPOs, IPAs, PHOs) and these may be well positioned to engage in PROMETHEUS Payment.

47. If Medicare does not pay on this basis, won't it all be too narrow in its application?

- Representatives of CMS have been involved in the design of this program. There is interest at Medicare in these kinds of approaches but the design team believes that working out the pilots for proof of concept and a careful and rigorous evaluation is important before undertaking the complexities associated with a government adopted program, even if on a limited basis.

48. Who selects the CPGs that form the basis for the ECRs?

- During the pilot phase, the design team and designated specialty-relevant subgroups will select CPGs from respected organizations such as the Institute for Clinical Systems Improvement (www.icsi.org), the American Heart and Stroke Association, the American College of Cardiology, the National Comprehensive Cancer Network, and others.