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Goals for Pay for Performance in Hematopoietic Cell Transplantation: A Primer

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A B S T R A C T

Bundled payments for hematopoietic cell transplantation (HCT) have long been accepted by both commercial health insurance providers and transplant centers, effectively outpacing the use of this payment model elsewhere in health care. As with the rest of health care, interest in payment and health delivery reform has created demand for transplant providers to address value by incorporating quality metrics and strategic changes in network design The complexity of evaluating performance in HCT complicates the goal of rewarding providers for better performance and penalizing poor results. We provide an introduction to value-based purchasing and address potential considerations in the adoption of incentives to improve quality of care in HCT.

INTRODUCTION

Bundled payments, pay-for-performance, and value-based purchasing are examples of terms that broadly describe various arrangements that provide financial incentives to health providers for improving the overall benefit per expenditure on healthcare services. Such programs are not new, with documentation of examples of clearly defined performance-based incentives in health care found as early as 1750 B.C. in a set of laws from ancient Mesopotamia [1]. More recently, momentum has been gathering since the Centers for Medicare & Medicaid Services (CMS; Medicare) began to pay hospitals for publicly reporting their performance on a limited number of indicators in 2004 [2]. The 2010 Patient Protection and Affordable Care Act included a number of provisions designed to improve quality of care, including the Medicare hospital value-based purchasing program, the Medicare physician value-based payment modifier, the Bundled Payments for Care Improvement demonstrations, and the Accountable Care Organization shared savings programs and demonstrations (ACA). In January 2015, US Department of Health and Human Services Secretary Burwell announced the administration's goal of tying 50% of all payments for traditional Medicare beneficiaries to these structures by 2018 [3]. A parallel and increasing focus on these payment models and networking strategies in the commercial healthcare purchasing sector has created an urgency for all types of providers to understand and participate in this new reimbursement environment (Table 1). This article outlines how bundled payments, pay-for-performance, and value-based purchasing have and will be used within the field of hematopoietic cell transplantation (HCT).

BUNDLED PAYMENTS

Early Model: Medicare Diagnosis-related Groups

For some time, policymakers and healthcare purchasers at all levels have been concerned about the unsustainable trajectory of healthcare costs. Until relatively recently, much of healthcare reimbursement in the United States remained on a fee-for-service or "percent of charges" basis, with little to no adjustment based on patient health status or outcomes after the service was complete. This payment model incentivized physicians and hospitals to focus on volume as the key mechanism for financial performance or growth. Medicare felt this acutely, because the traditional beneficiary populations are frequent users of care: Payments for medical expenses average $500 billion per year (14.4% of the US federal budget) [4].

To attempt to counteract the incentives of fee for service, CMS began using diagnosis related groups (DRGs) in the inpatient hospital setting in 1983 to create a prospective payment system [5]. DRGs are "prospective payment" in that

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Table 1
Payment Models

Model	Structure	Level of Risk to Providers
Fee for service	Separate payment is made to healthcare provider for each service.	Low
Inpatient DRG	Prospective payment system that assigns relative value to an inpatient hospital episode of care. Level of reimbursement is based on resource intensity of hospital admission.	
Bundled episode	A single predetermined payment to cover all goods and services delivered by healthcare providers for a defined episode of care.	Moderate
Disease-specific capitation	Payment system based on a payment for each person in a population receiving specific services. Nonspecified services are reimbursed as fee for services.	
Accountable care organization	A set of providers that work collaboratively and accept collective accountability for cost and quality of care delivered to a population. Payment may include fee-for-service, episode, and partial or full capitation.	High
Global capitation	Payment system based on a payment for each enrolled person rather than a payment per service. Global capitation covers all services such as professional, facility, pharmaceutical, lab, etc.	

the reimbursement rates for each DRG are set in advance, based on a relative value weighting system, and are not dependent on the charges billed by the provider for that individual transaction. Only 1 DRG is paid per inpatient visit, and the DRG is assigned based on various codes and data that appear on the billed claim submitted by a provider, such as *International Classification of Diseases*, or ICD, diagnosis and procedure codes, age, sex, and discharge status.

DRGs vary in reimbursement for the type of clinical episodes they reflect but remain a bundled payment for the set of smaller services encompassed by the inpatient visit. In some cases, DRG payments are adjusted further for patient complexity or for a hospital's status as an academic health center or Disproportionate Share provider. Medicare followed the Inpatient Prospective Payment System with similar structures and methodology (ie, bundling of Current Procedural Terminology codes) in other environments and continues to move toward episodic preset payment amounts.

Bundled Payments for HCT: Commercial "Case Rates"

Contracting with commercial health insurance providers for HCT has effectively outpaced the experience elsewhere in health care and is structured similarly to Medicare DRGs, albeit more expansive in time and scope. Since the mid-1990s, many, if not most, patients receive their care under contracts with prenegotiated rates bundled to include inpatient, postcare, and, often, precare. This "case-rate" approach hinges on the ability of providers at a center to assume responsibility for a greater percentage of the total cost of care delivered for the episode defined in the contract (Table 2). Case rates also potentially allow physicians more control over the treatment plan and location of care, thus enhancing value to the purchaser and efficiencies to the provider.

Case rates are complicated structures that need frequent review and modification by both parties because of changes in practice and technology but have been largely accepted for close to 20 years. Although a full discussion of contracting for HCT is beyond the scope of this article, considerations of certain contractual elements such as time frame, carve-outs for expensive drugs, coverage of donor evaluation, cell acquisition, and stop-loss thresholds may have direct or indirect impact on patient care decisions. HCT is an expensive therapy, and case rates have helped create predictable expenditures attached to catastrophic diagnoses in the lives of commercially covered members. However, as discussed later, further enhancing value by incorporating pay-for-performance metrics and strategic network design is becoming increasingly in demand by healthcare purchasers.

PAY-FOR-PERFORMANCE MEASURES

Pay-for-performance programs use financial incentives (or disincentives) to motivate quality improvement or maintenance. These programs typically reward providers with bonuses when high marks are achieved on selected quality measures shown to lead to better outcomes. Although such rewards may cause providers to prioritize incented quality measures, care must be applied to ensure this does not occur at the expense of unrewarded behaviors leading to an overall decline in patient care. The direct linkage of reward to performance differentiates pay for performance from public reporting of outcomes that, in theory, motivates through consumer response.

Elements common to all payment-based incentives are (1) defined targets to be evaluated, (2) measures and performance standards for establishing the target criteria, and (3) financial incentives [1]. One of the attractive features of pay-for-performance models is the capacity to compliment almost any payment arrangement. Most arrangements for pay for performance address quality-based measures but could also target costs of care, quantity of services delivered, or patient satisfaction [1,6].

Four types of measures used in pay for performance are clinical outcomes, process measures, structural measures, and patient satisfaction (Table 3). The National Quality Strategy, which created national aims and priorities to guide quality improvement efforts, can provide the framework for the development of quality measures [1,7,8]. The three aims of better care, better health, and lower cost coincide with the structures of new delivery and payment models.

Certain characteristics should be considered in selection of effective metrics chosen for performance measures. For obvious reasons, the metric should be associated with meaningful improvement in quality or efficiency so it is linked with improved value of care. The metric must also be reliably measurable and clearly linked to desired outcome. In measuring the metric, adequate risk adjustment for patient differences is critical to fairly compare performance and avoid unintended consequences, such as avoidance of high-risk patients [7]. The ability to continue to accept appropriate patients who may benefit from HCT is of particular concern because of the potential for cure, even in high-risk populations. Finally, the metric should be actionable and clearly linked to the desired outcomes such that addressing the indicator leads to enhanced value.

VALUE-BASED PURCHASING

Value-based purchasing is, in theory, the marriage of bundled payment and pay for performance, as operationalized through payer networks and contracting mechanisms. Because neither fee-for-service nor DRG-based reimbursement models provide strong inherent incentives to control