

STATE OF THE ART AND SCIENCE

The Challenge of Understanding Health Care Costs and Charges

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Health care prices are opaque, and patients and clinicians are equally in the dark about them. As Americans enroll in high-deductible health plans at unprecedented rates, the affordability of health care has received significant attention [1]. In 2015, “how much does it cost?” is an increasingly familiar question from clinical trainees. The problem is that right now it is not clear who has the answers. The costs of delivering care are obscured in layers of jargon and complex accounting [2].

Speaking the Same Language: Health Care Cost Terms

The first step in understanding health care costs is to be able to distinguish between terms such as “cost,” “charge,” “price,” and “reimbursement” (table 1).

Table 1: Defining Costs, Charges, and Reimbursement (adapted from *Understanding Value-Based Healthcare* [3])

Term	Definition
Cost	To providers: the expense incurred to deliver health care services to patients. To payers: the amount they pay to providers for services rendered. To patients: the amount they pay out-of-pocket for health care services.
Charge or price	The amount asked by a provider for a health care good or service, which appears on a medical bill.
Reimbursement	A payment made by a third party to a provider for services. This may be an amount for every service delivered (fee-for-service), for each day in the hospital (per diem), for each episode of hospitalization (e.g., diagnosis-related groups, or DRGs), or for each patient considered to be under their care (capitation).

These terms have specific meanings, but their interpretation often depends on whose perspective is being considered. To patients, cost usually represents the amount they have to pay out-of-pocket for health care services. This cost is very different from the amount that providers (i.e., health care organizations or clinicians) incur to deliver that

service. Further complicating matters, the cost to the provider is often calculated by including costs from categories like personnel and equipment that may seem disconnected from an individual patient's care.

The need for all of this terminology reflects the complexity of health care transactions. This complexity is largely a product of having multiple participating parties—the patient, the provider organization, and the “third-party” payer (insurer). Sometimes, a fourth party, such as a large employer that offers health insurance as a benefit (often referred to as the “purchaser”), is also involved. When discussing health care costs, it is important to ensure that the correct terminology is being used and that it is clear from whose perspective costs are being considered (i.e., payer, patient, provider, or purchaser).

So, how do costs relate to the “charge,” or the “price,” that health care providers put on the bill? Well, unfortunately, often there is [no clear relationship](#). The relationship would be clearer and costs-per-service more easily calculated if costs were assigned to categories such as “patient check-in” and “collecting history” [4]. Although this is not impossible, it would be a lot of work, requiring direct observation of each “labor input,” i.e., the number of person-hours involved in completing each task for an episode, as well as accounting for the costs of space, nonconsumable equipment, and administrative overhead on a minute-to-minute basis. Very few provider organizations are willing to put in this kind of effort.

Most hospitals have a “chargemaster,” an itemized list of prices, similar to a restaurant menu [5]. Health care facilities often set chargemaster prices at many times the amount for which they are reimbursed or paid by insurers. While this may sound strange at first, it allows hospitals to set a high starting point for ensuing closed-door bargaining with different commercial insurers and very high charges for the small fraction of self-pay patients who can and will pay the chargemaster or “sticker” price. (Of course, the group of “self-pay” patients is heterogeneous. While it may include the wealthiest of patients who seek care regardless of the price, it also includes those who lack insurance altogether, such as illegal immigrants.)

What Do Patients Actually Pay?

Most patients have health insurance and, as a result, are not paying the full charge on the bill but, instead, a “copayment” (i.e., a fixed small amount for a given service, often paid at the time it is received) or a percentage of the charge, depending on their insurance plans [6]. This makes life fairly challenging for anyone trying to answer the question, “Doc, how much is this going to cost me?” Even if the doctor knew the charge, he or she would be unlikely to know the specifics of a particular patient's insurance plan. The amount that a patient may owe is further affected by the setting or location of the health care good or service. For example, Medicare patients often pay a deductible of \$1,260 for acute hospitalization, and then Medicare covers the rest up to 60 hospital

days. But if a Medicare patient is seen in the emergency department and not admitted, or is “kept under observation status,” he or she is technically an outpatient, for which the copayment for hospital services may be as much as 20 percent of the total charge... so you can see how difficult it might be to predict what a given patient will pay for a particular intervention or treatment episode [7, 8].

The Price Transparency Movement

There is currently a national movement to make charges easily available to patients—an idea often referred to as “price transparency.” This movement has been made possible in recent years by a variety of new websites and tools that provide information directly to patients about the charges that they could face.

In February 2013, *Time* magazine published an exposé on health care costs, “Bitter Pill: Why Medical Bills are Killing Us,” by journalist Stephen Brill [9]. Shortly after, the then-Secretary of the Department of Health and Human Services, Kathleen Sebelius, took the unprecedented step of making available online the 2011 chargemaster prices of the 100 most common inpatient treatment services of all hospitals that treat Medicare patients [10]. This enabled Medicare patients, for the first time, to compare the prices of procedures across hospitals in their areas. This data also confirmed what several recent studies have demonstrated: there is wide variation in the prices of tests and procedures, even in the same geographic location [11].

Other websites use a variety of methods, including crowdsourcing, to identify the prices of health care goods and services. For example, at HealthcareBlueBook.com, one can search for the lowest prices for health care goods or services based on zip code [12]. Fairhealth.org, which makes available to clients a database of doctors’ fees contributed by payers nationwide, grew out of a legal investigation in New York into how insurance companies were setting reimbursements for out-of-network services [13, 14]. Castlighthhealth.com contracts with employers to provide their employees access to prices of health care goods and services covered by the company-sponsored insurance. Its initial public offering received a valuation of more than \$3 billion, reflecting the keen interest in this burgeoning area [15].

There is also great interest within health care in using the electronic health record (EHR) to display prices for various goods and services to physicians and physicians-in-training. Initial studies of this strategy showed mixed results, and the conventional wisdom became that prices in the EHR quickly turn into “white noise” that is ignored [16, 17]. However, more recent studies have found that clinicians are now more likely to react to price information [18, 19], perhaps due to the recent global attention to the importance of health care costs. In one controlled study at Johns Hopkins, displaying the Medicare Allowable Rates for lab tests to hospital physicians in the order-entry system led to substantial decreases in orders for certain higher-cost lab tests and resulted in a more-

than-\$400,000 net cost reduction over the course of a six-month intervention period [18]. Similarly, a study using dollar signs (\$-\$\$\$) to indicate the relative costs of antibiotics on culture and antibiotic susceptibility testing reports resulted in a significant decrease in prescriptions for high-cost antibiotics [19].

What Can Physicians Do?

While price transparency is an important element of helping patients receive more affordable care, it may be unreasonable to expect clinicians to master the specific details of what each patient may pay, particularly given the large number of plans and reimbursement rates set by insurance companies.

So, what should physicians do? While there may be an understandable initial instinct to throw our hands up [20], we propose an alternative strategy.

First, we physicians should take ownership of [our clinical decisions](#) and make sure they are actually going to make our patients better. Currently, more than one-third of the health care services we deliver do not help patients get better [21], so there is clearly room for improvement. For those looking for a place to start, the [Choosing Wisely](#) campaign has convened an unprecedented collaboration among numerous medical specialty societies to identify lists of wasteful practices, i.e., those that provide little clinical benefit [22].

In addition, doctors can and should play a role in [screening](#) patients for financial harm. Simple questions like “Do you have difficulty paying for your medications?” have been shown to help identify patients at risk for cost-related nonadherence [23]. Having a conversation with a patient about his or her finances is more likely to result in switching the patient to a cheaper alternative prescription drug [24]. Even if these conversations are uncomfortable and even if you don’t have all the answers, simply being aware of your patients’ financial concerns is a critical starting point.

Although the costs may not always be clear, and the price may not always be “right,” doctors still have an ethical obligation to “do no harm” by reducing waste and identifying and helping patients who are at risk for financial harm [25].

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