EDITORIAL

Disentangling Health Care Billing
For Patients' Physical and Financial Health

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For many physicians, the term *administration* elicits a negative response. In fact, some administrative tasks and expenses, such as quality improvement personnel, cybersecurity, backup generators, and even parking, are necessary to enhance patient experience and care. Other expenses, most notably related to billing and insurance-related activities, seem less justifiable.

In this issue of *JAMA*, Tseng and colleagues[1] estimated the administrative costs associated with physician billing and insurance-related activities in one large academic medical center with a fully implemented electronic health record (EHR) system. Based on a time-driven activity-based costing method and interviews with health system administrators and physicians, the authors estimated that the costs associated with billing activities performed by physicians represented, as a proportion of professional revenue, 14.5% for primary care visits, 25.2% for emergency department visits, 8.0% for general medicine inpatient stays, 13.4% for ambulatory surgical procedures, and 3.1% for inpatient surgical procedures.[1] For primary care visits, this translated to an estimated more than $99 000 of billing and insurance-related expenses annually for each primary care physician working in the system just to get paid.

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As high as these figures are, they likely underestimate the true financial burden of billing for physicians in most health systems. For one, the hospital and physicians of this academic system share a single billing organization, an unusual efficiency for an industry in which hospitals and physicians are typically separate business entities. In addition, billing costs in this study did not include costs within clinical departments for credentialing and other billing-related functions or charge integrity costs (ie, the costs associated with ensuring that all health care delivery charges are accounted for and properly accrued to each patient visit or discharge). While annual operating costs of the EHR were included in this estimate of billing costs, the capital costs of the EHR were not. When the full costs of EHR installation and implementation were fully amortized and attributed to billing, the calculated costs of billing increased by another 44% to 68%.[1] As the authors point out, the appropriate allocation of EHR costs clearly requires further refinement.

Despite the preimplementation assumption that EHRs would streamline coding and reduce clinical documentation requirements, this study suggests that, if anything, administrative time needed for billing has increased for physicians and other staff as EHRs have become more widespread. In the health care system the authors studied,[1] each primary care visit necessitated 3 minutes of physician time for billing, which amounts to about 5 hours per week for a typical primary care physician. These figures exceed previous estimates of 3 to 4 hours per week.[2,3] Data from physicians who report symptoms of burnout indicate that rising administrative burdens (with the time and frustration associated with EHR and billing at the top of the list) are worthy targets for improving productivity, quality, and safety.

The results from the analyses by Tseng et al[1] are consistent with previous reports[2-5] and again highlight how much health care is an outlier compared with other industries. The unnecessarily complex, fragmented, and inefficient system of billing, coding, and claims negotiations in the US health care system employs enough people to populate small nations just to ensure that health care organizations and clinicians are reimbursed for their services. While non-health care industries typically might employ 100 full-time-equivalents to collect payment for $1 billion in services, health care employs an astounding 770 full-time-equivalents per $1 billion of physician services.[3] The process of moving money from payer to hospitals and physicians in the United States consumes an estimated $500 billion per year, and 80% of that amount may be waste.[5] Evidence of that waste includes the high rate of errors in remittances (3-fold higher than other industries) and the high rate of billed charges that are initially denied by insurance companies (12.6% in one study) but that are later paid (81%).[3]

The study by Tseng et al[1] illustrates the fundamental and important concept that the first step to reducing costs is knowing the costs. Few health systems have identified the costs of direct patient care,[6] much less the indirect costs of care, such as billing and revenue cycle activities, particularly in health care settings that have implemented EHRs. Time-driven activity-based costing, the method used by Tseng et al,[1] includes a detailed mapping of every step of the process and measures costs meticulously on a dollars-per-minute basis for every person and resource involved. This method highlights opportunities for efficiency, particularly the high costs of having physicians participate in revenue cycle activities. Simpler and more scalable cost-accounting approaches have measured labor costs in terms of overall percentage effort of employees[4] or for physician labor costs,

on a dollars-per-relative-value-unit basis.[7] Regardless of the cost-accounting method used, clarity about the drivers of cost can guide cost-reduction strategies.

Unmeasured in the analysis by Tseng et al[1] and in previous analyses are the significant financial and social costs of the current billing and administrative processes to patients and their families. First, the costs of billing administration borne by hospitals, physicians, and insurance companies are passed back to consumers and their employers through higher premiums and higher health care bills. Second, unintended victims of the complex billing and payment systems are patients who are personally responsible for paying their own health care bills. In the current system, the hospital charge master, the comprehensive list of items billable to patients or their insurer and their charges, serves as the starting point for downward negotiation between hospitals and private insurers. But for uninsured patients and for insured patients who are responsible for significant copayments and deductibles, the charge master represents an inflated pricelist that patients rarely negotiate successfully. Excessive administrative costs exacerbate the problems of medical bills as an already leading cause of personal bankruptcies.[8] Moreover, the complete lack of transparency and recourse for patients to contest charges, coverage, and deductibles effectively undermines consumer-driven change and is unfair to patients. Few health care professionals can even understand their own or their family's medical bills. The wasted time, added effort, and emotional stress engendered by the current flawed billing system compound the stresses of ailing physical and financial health of patients. These costs deserve to be measured.

From a national policy perspective, the attention that the report by Tseng et al[1] draws to rising billing and administrative costs could not be more timely. Four major developments actively transforming the health care landscape create opportunities to solve the current billing and insurance conundrum: (1) evolving alternative payment models, (2) increasing mergers among health insurers and between insurers and health systems, (3) EHR implementation, and (4) rising consumer payments.

Evolving Alternative Payment Models

Barriers in the billing process, such as prior authorization or claims denials, serve as poorly positioned checkpoints to control use in a fee-for-service system. Global payment models, such as capitation or bundled payments, better align the interests of hospitals and health insurance plans. Currently, alternative payment models add complexity to conventional fee-for-service billing because of added quality metrics and complex contracting. However, conceptually, standardized global payment models could radically simplify item-by-item claims and medical bills. Although a payment environment that manages both global payments and fee-for-service would not expect satisfactory reductions in administrative burden, some reductions would be yielded. The real reduction in administrative costs will only be realized when the payment environment is uniformly simplified.

Increasing Payer and Hospital or Health System Mergers

Increasing market consolidation bringing insurers and health systems (including hospitals and physicians) under the same corporate umbrella could help simplify what could then be considered "internal" transactions. Along the same lines, discussions of a national single payer system suggest that such a model could reduce administrative costs substantially, although the political viability of this strategy is uncertain.[9]

EHR Implementation

By facilitating automatic transmission of clinical and financial data, EHRs create the opportunity for simplified billing and insurance-related processes, provided the right standards are implemented. Cutler et al[10] estimated that adopting standards for electronic transactions, such as billing and claims data exchange, could save more than $20 billion each year. Standards are universal in commerce. For example, the US credit card system operates on one set of payment rules and processes that enable a plethora of bank credit cards to compete on interest rates, fees, loyalty programs, and more.[3] Health care could do the same.

Other opportunities to leverage EHR investments include the measurement of costs, including administrative costs, in nearly real time to track the financial implications of improved billing processes. Computer decision support tools that can automatically justify a particular test or drug based on accepted evidence-based indications would obviate the prior authorization process. Automated coding, through user-friendly interfaces or built-in natural language processing, could improve accuracy and reduce administrative costs further.

Taken together, the combination of alternative payment models and enhanced EHR technology could make a simplified, functional, and transparent electronic billing and payment system the new standard.

Rising Consumer Payments

These changes may be accelerated by the mounting pressure from consumers as payment obligations shift increasingly to them. Whether it is direct payment for noncovered services, a higher share of premium expenses, or increasing copays and deductibles, consumers now pay a larger share of health care costs than employers.[11] Consumers are accustomed to retail-level transparency of pricing, flexible financing solutions, and speed, clarity, and consistency of billing (and not Explanations of Benefits statements inexplicably labeled "This is Not a Bill"). Ideally, the shift from fee-for-service to global (bundled or capitated) payment models could make price transparency a long overdue reality. Patients could know upfront how much they will owe at the time that care is provided, just like in most other industries, and not weeks and months later.

As the report by Tseng et al[1] demonstrates, now is an opportune time to start unraveling the Gordian knot of health care billing and administration, ultimately, for the sake of the health—both physical and financial—of patients. Alternative payment models and EHRs may just be the 2 ends of the cord that the health care system has needed to find to help begin the disentangling.

ARTICLE INFORMATION

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