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Saving Billions Of Dollars—And Physicians' Time—By Streamlining Billing Practices

ABSTRACT The U.S. system of billing third parties for health care services is complex, expensive, and inefficient. Physicians end up using nearly 12 percent of their net patient service revenue to cover the costs of excessive administrative complexity. A single transparent set of payment rules for multiple payers, a single claim form, and standard rules of submission, among other innovations, would reduce the burden on the billing offices of physician organizations. On a national scale, our hypothetical modeling of these changes would translate into $7 billion of savings annually for physician and clinical services. Four hours of professional time per physician and five hours of practice support staff time could be saved each week.

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Payment for health care services is often complicated by the introduction of a third party, such as a health plan or an insurance company. Unlike the first two parties—the patient and the provider—the third party neither provides nor receives services, but rather handles the payment transaction between the provider and the patient.

This system of third-party payment requires certain administrative controls or processes to ensure financial security. Such processes include those that specify the services provided; document the services' eligibility for payment; match services to agreed-upon fee schedules; reject services for which payment is not appropriate; ensure prompt payment; and minimize the potential for fraud and abuse. Yet there is ample evidence that the complexity of these administrative processes may exceed what is necessary to preserve adherence to rules and ensure accurate and timely payment. Such excessive complexity, which can result from a number of factors, poses difficulties to providers and adds cost to health care transactions without adding any benefits.[1,2]

Prior studies of this problem have examined the relative overall administrative costs of health care in the United States, particularly in comparison to those in Canada. However, these studies have been able to provide only an overall view of the costs and do not provide specific direction to foster improvements. As a result, these findings have done little to move stakeholders in the U.S. health care system—including patients, providers, payers, purchasers, and policy makers—to confront excessive administrative complexity as a target for reform.

The Patient Protection and Affordable Care Act of 2010 directs health plans to adopt and implement uniform standards for the electronic exchange of health information by 2013, to reduce paperwork and administrative costs. However, this provision will not address the larger problems of excessive, different, and changing requirements imposed on the exchange of all health information, including billing information. At a minimum, the new law may begin to simplify to some degree the transfer of information. But it does not set out any firm guidelines as to how information must be transferred. Thus, administrative complexity is likely to remain high and is likely to be a high-value "target" for finding savings in ongoing incremental reforms.

Our study examined excessive administrative complexity from a focused and potentially practical perspective. We undertook a detailed analysis of a large multidisciplinary physician organization operating under fee-for-service, where the provider is paid for each individual service rendered to a patient. Our goal was to identify the burdens of excessive administrative complexity that are incurred in the system as a direct result of the provider organization's compliance with multiple payers and their numerous administrative payment requirements. Our perspective provides a unique window into the problems of excessive administrative complexity because of the physician organization's need to efficiently and effectively secure payment for a wide variety of outpatient and inpatient services.

We find that excessive administrative complexity costs physicians nearly 12 percent of their net patient service revenue. We discuss simple reforms that go beyond those planned for 2013 in the Patient Protection and Affordable Care Act. We estimate that if these reforms were adopted, they would translate into annual savings of $7 billion nationally for physician and clinical services billings, as well as four hours of time each week per physician and five hours of time each week per support staff member.

Background

Administrative costs associated with receiving payment have been a well-recognized contributor to rising U.S. health care costs for decades.[3] The complexity of administering our system of payments and its attendant costs have continued to grow in response to an increasingly complex environment. Until recently, there has also been a lack of tools for dealing with such complexity, such as electronic encounter and claims processing.[4] Research and reform efforts have focused on other issues, such as access, quality, safety, prescription drug payment, and medical informatics. Meanwhile, in 1999 aggregate costs of administration of health care—including costs for documentation, coding, and billing—exceeded 31 percent of U.S. health care expenditures, up from 22 percent in 1983.[5]

More recent studies have shown that in 2006–7 the rate of growth in resources dedicated to administration, 6.6 percent,[6] outpaced that of professional services and was comparable to the growth rate in hospital (7.5 percent) and prescription drug (6.7 percent) spending.[7,8] Compounding the concerns about growing health care administration costs is the evidence that administrative complexity has an adverse impact on quality of care.[9] The value of the care obtained is thus compromised from both a cost and a quality perspective.

Comparisons With Other Industries In contrast, other economic sectors such as consumer product distribution, industrial manufacturing, and service providers commit substantially lower resources to the administration of payment for services. Non–health care sectors correct 3 percent of remittances for errors, while the industry standard in health care is more than three times higher.[10] Many non–health care sectors operate 100 full-time equivalents (FTEs) or fewer per $1 billion collected (based on correspondence with the authors from McKinsey and Company Consulting, February 2008). That compares to median staff levels of 770 FTEs per $1 billion collected for physician practices.[11] Although physician practice transactions and health care payment systems are more complex than those of the sectors used here for comparison, the greater-than-sevenfold increase in collection costs in health care raises the question of whether all of the resources currently committed to these processes are being put to their best use.

Financial Impact The financial impact of excessive administrative complexity on physician organizations can be dramatic. In one study of a typical ten-physician practice, it was estimated that excessive administrative complexity cost the practice more than $250,000 per year.[12] Another physician organization saw 32 percent growth in the staffing of its professional billing office over a six-year period, to 250 full-time equivalents. The expansion was needed to help deal with administrative complexity and was independent of the practice's programmatic growth.[13]

It has long been recognized that the costs of compliance and adjudicating payment disputes are indirectly passed on to purchasers and patients. These translate into significant resources that could be spent elsewhere in our health care system. Yet there has been little concerted action to remedy this situation.[14]

Nonfinancial Toll There is also evidence that undue administrative burden extracts nonfinancial tolls as well. For example, a review of the major contributors to the dramatic decline in physicians' perception of their practice environment over the period 1992–2006 singled out the costs of practice management in general, and excessive administrative complexity specifically.[15]

Understanding The Burden In thinking about how to reduce and eliminate some of this burden, it is important, first, to understand the full administrative burden and, second, to translate it into dollars. Microanalysis of the billing process provides the data needed to begin this task, and it may ultimately help health plans comply with the Patient Protection and

Affordable Care Act and create uniform measures for data exchange.

Study Data And Methods

We used case-study methods[16] to examine and identify the excessive administrative complexity burden imposed on a large urban-based academic teaching hospital's physician organization. The organization contracts with multiple payers, each with different payment requirements. The physician organization's professional billing office is the group responsible for submitting and processing all claims on behalf of the physicians. We first identified the actual administrative functions, staffing, and associated costs related to the billing, processing, and payment of fiscal year 2006 claims for the organization's professional billing office and clinical practices. We then developed a revised staffing model, assuming that the same claims were being processed under a hypothetical set of payment requirements.

These hypothetical requirements were stripped of the excessive administrative complexity and the no-value-added processes that currently exist in the multiple payer–multiple requirement system. The revised model identified the functions, staffing, and associated costs for both the professional billing office and the clinical practices under the hypothetical circumstances. The changes observed in administrative functions, staffing, costs, and revenue is assumed to be the excessive administrative complexity burden.[17]

EXPENSES This burden was identified from both the expense and the revenue perspectives. The expense side of the burden is considered to be the "no value added" time—labor costs—required by staff to comply with the administrative requirements of payers beyond what is necessary to ensure fair payment for services. The expense side of the burden also includes an estimate of the infrastructure costs—capital and nonlabor operating costs—or overhead of the professional billing office and the clinical practices. These costs and overhead are required to pay for the additional staff time and processes to deal with excessive administrative complexity.

REVENUES Earlier studies have found that up to 18.2 percent of claims submitted are rejected based on nonclinical grounds.[11] As a result, we also estimated the revenue side of the complexity burden. This is the revenue lost when claims are inappropriately rejected, delayed, and reprocessed or when the reimbursement rate is lowered. Although there is also a potential loss of interest income due to delayed payment, this burden was not estimated. However, it represents another cost to the provider.

UNIFORM RULES One assumption in particular is key to this analysis and the ability to distinguish no-value-added excessive administrative complexity from total administrative costs. That assumption is that one set of provider payment requirements, uniform to all payers, would reduce unreasonable administrative costs. It is important to note that uniform provider payment requirements and transparency of processes do not imply a single payer system. Rather, they imply a single set of payment processing rules applied to multiple payers.

The Visa card system is an example of a transparent uniform set of payment rules and processes that underlie a system of bank credit cards that still compete on the basis of price—interest rates—and benefits.[18] As in the Visa card system, a single set of transparent payment rules would not necessarily decrease the diversity of insurance product offerings or adversely affect choice. The one major change to the competitive landscape from having a single set of payment requirements, however, would be the elimination of complex and opaque rules that serve only to increase insurers' profit margins.

MEDICARE PAYMENT RULES Another key assumption underlying this analysis is the use of Medicare fee-for-service physician payment rules as the model for a single set of transparent payment requirements. The Medicare rules may or may not be ideal, but using them explicitly recognizes that there is the need for some level of administrative consistency to ensure fair and accurate payment.

The effectiveness of Medicare payment rules and procedures in combating fraud and abuse is comparable to that of commercial payers. The FBI estimates that 3–10 percent of total health care expenditures, both public and private, are fraudulent.[19] This suggests that the Medicare and non-Medicare payment rules are equivalent in terms of achieving fair and accurate payment.

We focused on the fee-for-service rules because in our market area, Medicare managed care accounts for less than 11 percent of Medicare beneficiaries.[20] Characteristics of Medicare physician payment policy that decrease administrative complexity include the following: (1) One set of transparent payer rules—as opposed to opaque and frequently changing payment rules in the commercial insurance sector—and uniform deadlines for filing claims. (2) Prompt response time to claims filings—fourteen to twenty-one days. (3) The absence of referral requirements for outpatient services. (4) Electronic processing, including charge submission, payment processing, rejection communication,

and verification of patient eligibility. (5) One set of payment posting rules, full disclosure of all rules, one consistent set of coding rules, a universal credentialing system, automated claims and remittances, and standard subscriber identification numbers across all payers.

Using the Medicare fee-for-service physician payment rules also offered the further advantage that study results could be generalized nationally and easily translated into policy and action.

BENCHMARK Finally, the physician organization that we examined provides a best-case scenario in that it is a recognized "high-performance" billing organization. The organization sets the benchmark among practices for low days in accounts receivable, high net collection rate, low cost of billing office as a percentage of collections, and low cost per claim.[21] In addition, it has fully implemented an outpatient electronic health record that facilitates central capture and processing of billing-related documentation—a practice that improves the efficiency of the billing process.

Value could be realized through improvements in physician and staff work life, more time with patients, or increased productivity.

Study Results

HOW MUCH DOES THE BURDEN COST? The excessive administrative complexity of the payment system was found to exist primarily in two areas: processing and receipt of payments for physician services in the professional billing office, and administrative functions of physicians and their staffs in the clinical practices. Embedded in the claims processing costs were costs of excessive administrative complexity related to successful appeals of denied claims and reduced revenue due to rejected claims that would have been paid under our alternative single transparent rule set and processing requirements.

In fiscal year 2006, the cost of excessive administrative complexity, including both expense and lost revenue, was nearly $45 million for this organization, or 11.9 percent of net patient revenue. This represents $8.43 of net patient revenue per dollar of burden spent, or $50,250 in burden per physician. These costs, listed in Exhibit 1, primarily consist of labor costs, with the exception of rejected claims and nonlabor infrastructure costs, which have been conservatively estimated at the professional billing office and clinical practice department level.

Of the total estimated administrative complexity burden, 12.5 percent, or $5.6 million, was directly associated with the processing and billing of claims in the professional billing office. Exhibit 2 lists the cost centers and functions within the professional billing office and their estimated costs and excess staff that result from excessive administrative complexity. Among these functions, group practice management and third-party billing have incurred the largest proportion of administrative burden. Both of these functions were estimated to include more than $1 million in administrative burden. These costs of excessive burden do not include the estimated 29 percent of staff time spent following up on claims that are initially rejected but later paid upon appeal.

The largest portion of the administrative complexity burden, 74 percent, is attributed to the time costs incurred by practicing physicians and their office staffs in preparing paperwork and contacting payers about prescriptions, diagnoses, treatment plans, and referrals. Many of

EXHIBIT 1

Financial Cost Of Administrative Complexity Burden In A Physician Organization

Source of burden	Burden ($ thousands)	Percent of total burden	Percent of physician organization's net patient service revenue, FY06
Professional billing office	5,612	12.5	1.5
Physician practices	33,116	74.0	8.8
Revenue lost on legitimate claims	6,000	13.5	1.6
Total financial burden	44,728	100.0	11.9

SOURCE Authors' analysis as described in text, using Massachusetts General Physicians Organization staffing and cost data.

EXHIBIT 2

Administrative Complexity Burden In A Physician Organization's Professional Billing Office

Billing office's cost centers or functions	Cost of administrative complexity ($ millions)	Estimated extra staff (FTEs)	Extra FTEs as percent of actual FTEs
SALARIES			
Group practice management	1.61	19.3	40
Third-party billing	1.26	24.3	37
Coding	0.32	5.0	10
Production	0.27	6.3	18
Administration	0.22	1.5	15
Payer relations	0.09	1.0	17
Information systems	0.08	1.0	8
Customer service	0.05	1.0	14
OTHER			
Outside programming	0.57		
Department overhead	1.14		
TOTAL	**5.61**	**59.4**	**21**
Burden as percent of billing office's total costs	24%		

SOURCE Authors' analysis as described in text, using Massachusetts General Physicians Organization staffing and cost data. **NOTE** FTE is full-time equivalent.

the subspecialty practices within the physician organization even have full-time staff members dedicated to referral processing. The physician time estimated at four hours per week accounts for $28.4 million of the estimated burden, while the practices' administrative staff and nursing time of five hours a week accounts for $4.9 million. These "costs" are best viewed as opportunity costs, rather than as amounts that could be turned into true dollar savings for the organization. However, value could be realized through improvements in physician and staff work life, more time with patients, or increased productivity.

On the revenue side, we found that for non-Medicare payers, 12.6 percent of billed charges are denied on initial submission. After appeal(s), 81 percent of initial denials are eventually paid—10.2 percent of charges. The remaining 2.4 percent write-off for non-Medicare payers is higher than the denial rate of Medicare. The difference is attributable to a loss of legitimate revenue—usually a result of missing the filing limit date because of initial rejection—which would be valued at $6 million by the physician organization. In addition, 29 percent of current professional billing office staff effort is on processing and appealing claim denials that are eventually paid.

HOW COULD THE BURDEN BE REDUCED? A single transparent set of payment rules for a health care system with multiple payers could reduce the stress and burden common in a billing office of a physician organization. Some of the tasks and functions performed by office staff that would be eliminated or that would take less time are listed in Appendix Exhibit 1.[17] Most changes would reduce the interaction of billing staff with payers, reduce the reprocessing of claims and the reentry and repetition of tasks previously performed, and reduce the time spent staying current and reviewing payer guidelines for payment.

Discussion

Our finding that excessive administrative complexity costs 11.9 percent of net patient service revenue is similar to that of other recent studies using different methods.[22] Some administrative tasks will always be required to process claims for payments of services, to measure performance for improvement, and to ensure that payments are made for services performed. However, the U.S. health care system has generated byzantine systems of rules and regulations regarding payment for medical services. The result has been a growing and costly bureaucracy, which, in the end, pulls resources from direct patient care.

Although not all costs of excessive administrative complexity have been captured in our study, both real costs in billing operations (estimated at 1.5 percent of net patient service revenue) and opportunity costs in physicians' practices are significant. Our findings, on a national scale, translate into approximately $7 billion of direct savings for physician and clinical services billing operations as well as approximately four hours per physician and five hours per practice support staff member per week.[8]

This estimate is similar to findings from a recent national survey of physicians and practice administrators. The survey estimated that physicians spent three hours weekly interacting with health plans. Nursing and administrative staff spent even greater amounts of time doing so.[23]

Our estimates of the costs of administrative complexity in a physician organization, although arguably conservative, are also incomplete. We focused only on a physician organization's perspective. However, we recognize that sizable additional savings would also accrue to payers under our single-payment-rule scenario. Payers also have personnel and costs associated with adjudicating appeals for payments that are initially denied but eventually paid. These could not be quantified here.

COSTS NOT INCLUDED Because we focused on a physician organization's perspective, we did not include any potential savings from administrative simplification related to inpatient costs. In addition, there are costs related to quality reporting, improvement, and pay-for-performance administration that are not included here, because they could not be characterized as no-value-added activities. The staff costs incurred by the physician organization to measure, evaluate, and report quality indicators have not been identified. Yet as quality and patient safety become more prominent health policy issues and topics for discussion and mandatory reporting by payers, the costs to comply with these mandates versus the value they generate should be a subject for future policy debate.

OPPORTUNITY FOR REFORM The growth in administrative complexity has been largely overlooked as an opportunity for health care reform, with administrative expenses being viewed as a relatively mild influence on the growth in health spending.[24] The Patient Protection and Affordable Care Act of 2010 does not contain major provisions to limit excessive administrative complexity. However, it does require that health plans begin to standardize the transfer of electronic data, which will cut down some of the duplicative information technology costs. The law does not specifically address the need for comprehensive uniformity of all data and information requirements.

The results of this study enumerate the inefficiencies engendered by excessive administrative complexity. We also hope that they will provide detail to enable understanding of the magnitude of these costs, and to inspire multistakeholder discussions around proposals of incremental reforms that standardize payment processing rules across payers. The current cost of excessive complexity would not be tolerated by employers from any other type of vendor. We believe that once fully explained, the current administrative burden will be recognized as intolerable by patients, purchasers, and policy makers.

The growth in administrative complexity has been largely overlooked as an opportunity for health care reform.

Thus far, health reform has not resulted in a single-payer mandate that replaces the U.S. health insurance industry and nationalizes billing and payment processes. But the evidence of the system costs from excessive complexity in our case study indicates that imposing a standard set of payment requirements, increased payment-rule transparency, standardized forms, and a standard set of data exchange requirements remains an important and high-value target for future policy reform efforts.

An incremental move to one set of payment rules would yield significant dollar savings as well as work-life and productivity opportunities for physicians and their office staffs. Done carefully, administrative simplification could still leave room for a diversity of insurance products and could promote innovation without relying on blunt and opaque administrative processes as a tool.

The savings from reducing administrative complexity could be translated into decreased costs in general. These decreased costs would be of greater magnitude than estimated here. Many of the changes under the single-rule-set scenario would result in decreased costs for payers as well, and would provide resources that could be passed on as savings to purchasers and patients or could be used to provide additional needed health services.

Achieving these savings would not require restructuring the basic market-system tenets of our complex health care system through, for example, mandating a single-payer approach. Rather, mandating a single set of rules, a single claim form, standard rules of submission, and transparent payment adjudication—with corresponding savings to both providers and payers—could provide systemwide savings that could translate into better care for Americans. ■

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