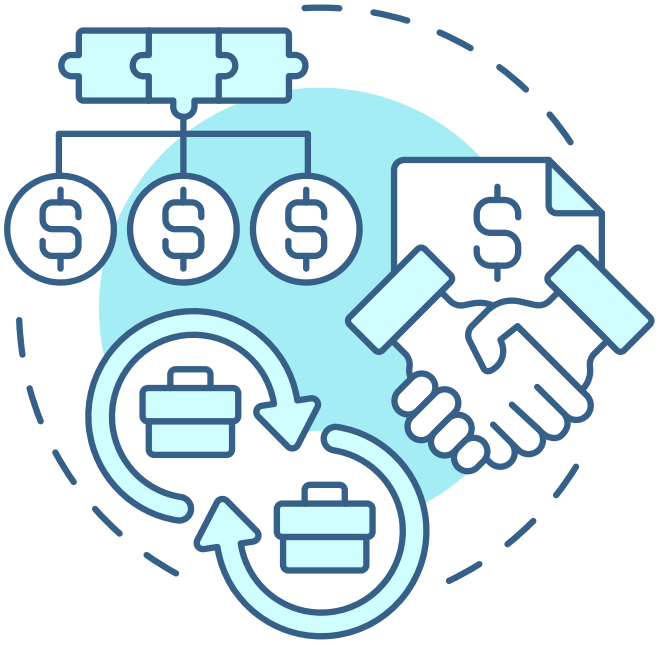
Episode-Based Cost-Sharing



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About VBID Health:

VBID Health specializes in designing and promoting health benefit plans and payment strategies that get more health out of every health care dollar spent. VBID Health provides streamlined, value-based insurance design consulting services to facilitate creation and adoption of VBID plans and payment policies that increase patient, employee, and enrollee health. VBID Health facilitates the Low-Value Care Task Force, comprised of public and private employers, business coalitions, consumer advocates, health plans, and life science companies, all focused on accelerating concerted action to reduce low-value medical care and thereby reduce pressure on payers and consumers. For more information, visit vbidhealth.com

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TABLE OF CONTENTS

1 EXECUTIVE SUMMARY

2 INTRODUCTION

10 THE EPISODE-BASED COST-SHARING MODEL

14 ADVANTAGES TO HEALTH CARE ENROLLEES

16 ADVANTAGES TO HEALTH CARE PROVIDERS

17 ADVANTAGES TO EMPLOYERS

19 POTENTIAL PITFALLS & CHALLENGES TO IMPLEMENTATION

23 MOVING FORWARD

- RECOMMENDATIONS FOR EMPLOYERS
- PUBLIC POLICY RECOMMENDATIONS

24 CONCLUSION

25 REFERENCES

32 GLOSSARY

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EXECUTIVE SUMMARY

Insured US health care consumers are increasingly burdened by unpredictable and often unaffordable out-of-pocket costs. Because these costs are typically revealed only after care has been delivered, patients struggle to make informed choices or budget effectively. This uncertainty arises from a combination of variable treatment intensity, opaque pricing, and the complexity of insurance benefits. As a result, many insurance beneficiaries—particularly those with lower incomes or chronic health conditions—face significant financial hardship, including delayed or skipped care, growing medical debt, and, in some cases, personal bankruptcy.

The ramifications of this issue extend beyond patients. Health care providers face challenges collecting payments from patients, often recovering only a fraction of what is owed. The sub-optimal collection rate then strains providers' revenue streams and increases administrative costs. Consequently, care providers may require higher payment rates from payers, thereby fueling the vicious cycle of increasing costs across the health care system. Although market and policy solutions—such as patient assistance programs, receivables financing, and debt reporting reforms—offer some relief, they largely address the consequences rather than the root causes of unpredictable costs.

Episode-based cost-sharing is an insurance benefit design innovation that could mitigate many of these problems by providing patients with a guaranteed out-of-pocket cost amount for a defined episode of care before care is delivered. The prospectively fixed cost would be calculated based on the actuarial expectation of intensity of care, negotiated provider rates, and individual insurance benefits. Crucially, this model would preserve existing insurance design features (e.g., deductibles, co-insurance, tiered provider networks) and provider payment models, requiring no structural overhaul.

Key advantages of episode-based cost-sharing would entail:

- For health insurance beneficiaries: financial predictability, increased access to care, reduced medical debt, and empowerment to make better value-based care decisions.
- For health care providers: improved revenue collection and reduced administrative burden.
- For employers: enhanced employee health and satisfaction, better recruitment and retention outcomes, and potentially lower health care prices.

Episode-based cost-sharing is a feasible, scalable strategy to reduce the negative consequences of cost uncertainty in the US health care system. This innovation can help improve affordability, transparency, and access, fostering a more equitable and efficient health care system.

INTRODUCTION

The amounts that insured US health care consumers are obligated to pay toward the cost of their care—in addition to their insurance premiums—have been increasing rapidly. A key challenge is that patients' out-of-pocket costs are typically not known until after care has been delivered, in part because clinical and financial risks are intertwined (1). Unpredictable out-of-pocket costs contribute to the high incidence of patients' financial stress, forgoing or delaying care due to the inability to afford even routine medical care services, incurring medical debt, creating personal fundraising campaigns, and in some cases, filing for bankruptcy (2–5). The difficulty for insured individuals to predict and afford unexpectedly high out-of-pocket costs contributes directly to reduced collections and uncertain revenue streams for most health care providers (6).

Why Are Beneficiaries' Out-of-Pocket Costs Difficult to Predict?

Under most health insurance arrangements, beneficiaries' out-of-pocket costs for a health care encounter are typically determined after care has been delivered based on the following interacting factors:

1. The realized treatment intensity (i.e., the set of services provided to the patient during the health care encounter). Reliably predicting treatment intensity is possible only for the most basic health care encounters, such as routine diagnostic imaging or laboratory testing. For example, a beneficiary who plans to receive a chest X-ray can reasonably expect to be billed for a single procedure code (Healthcare Common Procedure Coding System [HCPCS] Level I code 71045; potentially split into the professional and technical components depending on care delivery site), and a beneficiary who plans to undergo a comprehensive metabolic panel laboratory testing can expect to be billed for procedure codes 36415 for blood sample collection and 80053 for the laboratory testing. In many other health care encounters, however, treatment intensity may vary due to circumstantial elements, such as receiving an inconclusive test result or the occurrence of clinical complications that require unanticipated interventions—situations that are usually beyond patients' and care providers' control (7,8).

   For example, a pregnant beneficiary who plans to deliver the baby vaginally may reasonably expect to be charged for two billing codes: HCPCS Level I code 59400 billed by a physician for routine obstetric care for vaginal delivery[1] and a Diagnosis-Related Group (DRG) code 807 billed by a hospital for facility services related to

[1] Alternatively, 59409 or 59410, depending on the use of antepartum and postpartum care.

vaginal birth. However, if the patient experiences clinical complications associated with the birth, they may be ultimately billed for a DRG code 768 (vaginal delivery with an operating room procedure), 806 (vaginal delivery with complications), or 805 (vaginal delivery with major complications) instead of the anticipated DRG code 807. If the birthing team needs to perform an emergency Cesarean section, the patient will be billed for an HCPCS code 59510 for Cesarean delivery[2] by the physician and one of the DRG codes 786–788 for Cesarean delivery by the hospital. A patient experiencing such clinical complications may also receive—and thus be billed for—many additional services such as ultrasound imaging, laboratory testing, echocardiogram, etc.

2. Corresponding prices (i.e., negotiated rates for services delivered by in-network health care providers and charges for services delivered by out-of-network health care providers). Although recent federal regulations have required hospitals and health insurance plans to disclose prices of selected 'shoppable' health care services, obtaining health care prices before receiving care remains challenging for consumers. For example, one recent study documented considerable discrepancies in prices posted on hospital websites and those disclosed to consumers by the same hospitals over the phone (9). Moreover, the publicly available prices typically do not provide patients with information on their out-of-pocket contributions.

3. Health insurance benefits. Health insurance plans are complex products that many consumers find confusing (10). Crucially, benefits that many health plans offer to their enrollees are idiosyncratically dynamic, as they depend on several factors such as: the plan type (e.g., high deductible health plan [HDHP]), the setting in which care is provided and by whom, and that enrollee's previous health care spending in the given policy year. Specifically, the amount that a beneficiary will be obligated to pay out-of-pocket for a health care encounter depends on items such as the remaining deductible amount, the type of cost-sharing applied (e.g., co-payment or co-insurance), and progress toward the annual out-of-pocket maximum when claims for that health care encounter are processed by the insurance carrier.

How Do Unpredictable Out-of-Pocket Costs Affect Patients?

Without reliable prospective cost information, patients cannot make fully informed decisions regarding their provider and treatment options. The potential of incurring unaffordable out-of-pocket costs deters some patients—especially those with low incomes—from seeking care (2–5). Patients who undergo care do not have control over their out-of-pocket cost obligation because those who experience clinical complications usually receive more intensive care, which ultimately translates into higher-than-expected out-of-pocket costs (11).

[2] Alternatively, 59514 or 59515, depending on the use of antepartum and postpartum care.

Unexpected medical bills are a major driver of the medical debt epidemic in the US (12–18). In 2022, approximately 100 million Americans carried medical debt, with a median outstanding balance of about $2,500 (16–18). Medical debt is among the top reasons for online fundraising campaigns and personal bankruptcy (13). Most medical debt holders have family incomes below 400% of the federal poverty level and are in fair-to-poor health. This means that those who frequently access or use intensive, expensive health care services often cannot afford the associated out-of-pocket costs and, as a result, incur medical debt (18). Even for those patients who can afford their portion of health care costs, the payment process is usually highly confusing, frequently resulting in several explanations of benefits, medical bills from multiple providers with multiple payment options and portals to log into, further contributing to the general administrative burden on both health care consumers, providers and third-party payers. The cumulative impact of the clinical and economic effects of medical care utilization often leads to long-term negative financial consequences, frequently lasting far longer than the health-related effects of the clinical episode.

As nearly half of Americans report that they have skipped or delayed medical care because of cost, patients with such negative experiences may lose trust in the health care system and be discouraged from future medical care use. That ultimately results in adverse health outcomes, thereby making care delivery less effective and efficient in the long run (19–28). The negative effects of unpredictable health care costs have been one of the driving motivations for the recent health care price transparency movement, which aims to provide patients with (more) reliable cost information in advance of receiving care (29–32). Despite some progress on this front, most patients are still unable to obtain prospectively guaranteed out-of-pocket cost amounts.

How Do Unpredictable Out-of-Pocket Costs Affect Health Care Providers?

Health care providers typically seek payments for their services from two main sources: insurers and patients. While providers often have contracts with health insurers establishing the rules for payment of the insurers' portions of medical claims, such contracts are less frequent—and sometimes practically infeasible—for the portions of payments that are to be made directly by patients. Even when health care providers obtain written agreements from patients to pay outstanding balances, enforcing these commitments and collecting patients' cost shares has proven difficult and burdensome. In this sense, health care providers often serve as subprime lenders, which then increases the costs of their services (33).

This problem is further exacerbated by the ongoing trend of decreasing actuarial values of health plans, which is potentially driven by the desire to lower health insurance premiums. However, as the portion of the cost of care borne by patients is increasing, the portion borne by insurers is shrinking, and health care providers must collect larger portions of their receivables directly from patients.

A recent survey by the Medical Group Management Association showed that more than half of physician groups in 2022 reported an increase in the aging of their accounts receivable, meaning that it was taking longer to receive payments from patients (34). Another study found that the collection rate on patient account balances greater than $5,000 was four times lower than the collection rate from patients enrolled in low-deductible plans, whose balances were usually lower (6).

The direct consequences of these trends are that practices must spend more administrative resources to collect higher patient cost-sharing amounts. In addition, when the amounts owed from patients are deemed to be not collectable, providers must sort through options—including occasional drastic measures (see Box)—and potentially write off some of the amounts. A recent industry study documented that health care providers collect, on average, only 48% of patients' cost shares and 53% of bad debt from patients with some form of health insurance (35). These consequences lead to lower revenue from negotiated rates and simultaneously result in higher operating expenses, both contributing to diminished provider profit margins. Collection efforts may also place health care providers into a potential conflict of interest, as they need to press patients to pay their cost shares while simultaneously providing those same patients with necessary follow-up care.

Collection Policies of US Hospitals

A 2023 study by Kaiser Family Foundation Health News and National Public Radio (17) documented that:

- At least 17% of hospitals deny non-emergency medical care to patients with past-due bills
- At least 56% of hospitals sue patients or take other legal actions, such as garnishing wages or placing liens on patients' property, to collect bills
- At least 19% of hospitals sell patients' debt to third-party buyers, who can pursue patients to collect bills

How Do Unpredictable Out-of-Pocket Costs Affect Health Care Payers?

To offset the losses from reduced revenue due to the increasing rate of uncollectible patient cost-sharing amounts, health care providers may demand higher payment rates from payers. Thus, the chain of negative effects of the unpredictable patients' out-of-pocket costs ultimately impacts payers, who set the members' cost-sharing obligations, end up indirectly footing a portion of uncollectible patients' out-of-pocket costs through increased prices charged by health care providers for delivered services.

Existing Market and Policy Solutions to Alleviate the Symptoms

A growing number of companies in the US—including non-profit organizations (e.g., Patient Access Network Foundation, HealthWell, The Assistance Fund), fintech startups (e.g., CareCredit, Scratchpay, PayZen), and medical billing advocates (e.g., Goodbill, Resolve Medical Bills, CoPatient)—focus on helping patients pay their medical bills. The number of firms operating in this space underscores the immense need for better patient protection from unaffordable out-of-pocket costs. These market-based solutions, however, come with important tradeoffs. For example, companies that offer health-care-specific credit to individuals covered under health plans usually charge high interest rates, and failure to pay installments leads to the same consequences as failure to pay any debt, albeit with little recourse for the debt holder because medical debt is not secured by a person's property or belongings.

Simultaneously, a growing number of companies provide solutions to health care providers to finance their receivables (e.g., Viva Capital Funding, 1st Commercial Credit), supporting the notion that patients' inability to pay their medical bills presents considerable financial challenges to health care providers. These products are similar to those available in other industries and are usually referred to as "factoring"—a process through which companies sell all or some of their receivables in exchange for cash. The discount on the receivables is usually a function of the creditworthiness of the individual or company that owes the payment and the time it will take for the company buying the receivable to get paid. In health care, large health systems have more cash reserves than independent practices and more avenues to collect the portion of the claim owed by the patient. Thus, large health systems may decide to sell (at a deep discount) only the subset of patient receivables that they are highly unlikely to ultimately collect.

Other health care providers may enter into agreements with companies that will take on the collection of the entire patient cost-share and accept an overall discount of several percentage points. Most practices find such an approach favorable, given the increasing amount of patient cost-sharing they must collect. As one vendor once put it, "providers will pay to get paid."

Removing medical debt from consumer credit reports does not eliminate the debt itself.

Policymakers have worked to alleviate some of the pressure on health care consumers resulting from unaffordable medical bills. In January 2025, the Consumer Financial Protection Bureau finalized a rule prohibiting the inclusion of medical debt on consumer credit reports and barring lenders from using medical information in credit decisions (36). Although this rule has the potential to protect consumers from some adverse consequences of incurring medical debt, it will notably not remove the obligation to repay the debt nor address the cause of medical debt. As such, medical debt will remain a significant burden for many health care consumers. Moreover, the rule has been challenged in court, and thus, its implementation is uncertain.

A Solution to Alleviate the Cause of Unpredictable Out-of-Pocket Costs

The above-discussed solutions to unpaid out-of-pocket costs address the consequences, but not the root cause, of unpredictable and unaffordable patients' out-of-pocket costs. So far, policymakers have implemented some patient protections against unexpectedly high medical bills. These include a cap on out-of-pocket expenses for beneficiaries of employer-sponsored or individual-market plans, as required by the Affordable Care Act (ACA), or a similar annual cap on drug expenditures for beneficiaries enrolled in Medicare Part D and Medicare Advantage Prescription Drug Plans, as required by the Inflation Reduction Act (37,38). Additional policy options include: 1) provision of first-dollar coverage for health care services not subject to overuse (e.g., major traumatic injury) similar to the ACA preventive services provision that requires the elimination of consumer cost-sharing for specific preventive care services, 2) setting deductibles based on patients' income, 3) setting out-of-pocket maximums based on patients' income.

Existing policies aiming to protect patients from high medical bills have been meaningful but not sufficient.

Episode-based cost-sharing would provide beneficiaries with a prospectively guaranteed out-of-pocket cost amount for a defined clinical episode.

The nuances of these regulated out-of-pocket cost caps allow health insurance beneficiaries to incur unaffordable amounts for the care they receive (e.g., the Part D cap on prescription drug spending is limited only to drugs included on the plan's formulary). However, further reducing out-of-pocket cost maximums, deductibles, or co-insurance rates would inevitably translate to higher premiums, which would be politically infeasible and would likely lead to an increase in the number of uninsured.

Acknowledging the important tradeoffs between patient cost-sharing and premiums, and using a guiding principle of building on existing structures of the US health care system, such as the standard parameters of health insurance (e.g., deductibles, co-insurance, co-payments, tiered provider networks) and provider payment mechanisms (e.g., fee-for-service, Diagnosis-Related Groups, alternative payment models), consideration of the innovative episode-based cost-sharing model is warranted. Episode-based cost-sharing has been developed with the objective of reducing cost uncertainty for patients by determining—and guaranteeing—beneficiaries' out-of-pocket costs *before* care is delivered (39). In addition to the advantages provided to patients, its implementation would benefit providers and payers alike.

THE EPISODE-BASED COST-SHARING MODEL

Under the episode-based cost-sharing model, health plans would prospectively set beneficiary's cost-sharing obligations based on the actuarial expectation of treatment intensity within a defined health care encounter or episode and other relevant inputs, such as prices of health care services negotiated by the health plan with health care provider(s) applicable to the care episode in question.

The key feature of episode-based cost-sharing is that patients would be guaranteed the amount they would be required to pay out-of-pocket for a pre-specified health care episode before they make the decision to receive care. Health plans would bear the burden and benefit of deviations in realized treatment intensity (i.e., the total cost of care). Because health plans have the advantage of large risk pools—and patient cost-sharing constitutes a minority of total expenditures in many cases—their overall claims obligations are likely to be minimally affected.

Implementing episode-based cost-sharing would require no modification to existing provider payment models or key features of health insurance benefits.

Implementation of this innovative patient cost-sharing model would be especially straightforward alongside existing bundled payment arrangements. However, it could be implemented even for health care episodes comprised of services delivered by various health care providers—without any requirement for provider integration or coordination—even if each provider was paid through a different payment model (e.g., fee-for-service, Diagnosis-Related Groups). Moreover, the episode-based cost-sharing model would align well with existing health insurance parameters, such as tiered provider networks, deductibles, or co-insurance, because the guaranteed patient cost-sharing amount under episode-based cost-sharing would take these parameters into account. Finally, health care providers would be entitled to receive in aggregate the same amounts as under the status quo—episode-based cost-sharing would modify only the split of payments between patients and insurers.

Example: Episode-Based Cost-Sharing for Childbirth

Episode-based cost-sharing would be especially suitable for well-defined health care episodes that span a limited time frame or clinical events, and during which most patients receive treatment of similar intensity, but some—by virtue of chance—receive higher-intensity treatment. Childbirth is a useful example, as most pregnant patients who had not previously undergone a Cesarean section are likely to choose to deliver their baby vaginally. However, some patients experience labor and delivery complications that require the birthing team to perform unplanned services such as more intensive monitoring or a Cesarean delivery. This increased treatment intensity leads to increased payments to health care providers and typically, an unexpected increase in patient cost-sharing. In such cases, beneficiaries can incur amounts that are several thousand dollars higher than the amounts that they would be required to pay for an uncomplicated vaginal delivery.

The table below compares the amounts paid by patients and health plans—as well as the amounts received by health care providers—under the episode-based cost-sharing model versus the status quo for two hypothetical enrollees with different health benefits and two health care providers with different negotiated prices to highlight key features of the episode-based cost-sharing model. Both enrollees face the same co-insurance rate of 20%, but enrollee #1 has made more progress toward meeting their annual deductible than enrollee #2. The risk of experiencing clinical complications is the same for both enrollees at the two health care providers, but provider #1 negotiated higher prices for their services than provider #2.

In this example of episode-based cost-sharing, patients' out-of-pocket cost obligations would vary based on their health insurance benefits (progress toward their annual deductible or out-of-pocket maximum [for simplicity, not considered in this hypothetical example]) and provider negotiated amounts (thereby incentivizing plan enrollees to seek care from higher-value providers), but crucially not by experiencing unexpected clinical complications. Those few patients who experienced unanticipated clinical complications would pay lower amounts out-of-pocket than under the status quo (and thus would not be financially penalized for their "bad luck"). Simultaneously, patients who experience no clinical complications would pay slightly higher amounts out-of-pocket than under the status quo in exchange for the certainty of their financial obligation and, more importantly, protection against financial exposure in the face of an unlikely event—an elemental premise of insurance.

In practice, the calculations applied in this simplified example would use specific payer-provider negotiated prices and be more granular to allow for additional possible clinical scenarios and their corresponding probabilities.

Table: Comparison of patients' out-of-pocket costs, plan payouts, and provider receivables under episode-based cost-sharing versus the status quo

Plan enrollee and their benefits	Provider	Potential clinical outcomes with associated probabilities and negotiated prices	Status Quo			Episode-Based Cost-Sharing		
			Patient Pays	Plan Pays	Provider Receives	Patient Pays	Plan Pays	Provider Receives
Enrollee #1 • Remaining deductible: $1,000 • Co-insurance rate: 20%	Provider #1	No complications (vaginal birth): 75%; $15,000	$3,800	$11,200	$15,000	$4,400	$10,600	$15,000
		Complications (emergency Cesarean section): 25%; $30,000	$6,800	$23,200	$30,000		$25,600	$30,000
Enrollee #2 • Remaining deductible: $3,000 • Co-insurance rate: 20%		No complications (vaginal birth): 75%; $15,000	$5,400	$9,600	$15,000	$6,000	$9,000	$15,000
		Complications (emergency Cesarean section): 25%; $30,000	$8,400	$21,600	$30,000		$24,000	$30,000
	Provider #2	No complications (vaginal birth): 75%; $12,000	$4,800	$7,200	$12,000	$5,120	$6,880	$12,000
		Complications (emergency Cesarean section): 25%; $20,000	$6,400	$13,600	$20,000		$14,880	$20,000

Episode-Based Cost-Sharing Is Aligned With, Yet Independent of, Episode-Based Payment Models

Teams of providers may be paid for their services through episode-based payment models (alternative approaches to paying health care providers for their services), such as in the Medicare Bundled Payments for Care Improvement or Comprehensive Care for Joint Replacement initiatives, as well as similar models used by commercial payers and employers (e.g., case rates and specialty care alternative payment models). Under these payment arrangements, providers agree to be at risk for a prospectively fixed amount per episode of care, regardless of the variable treatment intensity that each patient needs. Currently, **the fixed payment per care episode does not translate to a prospectively fixed cost-sharing amount for patients.** This is because providers submit claims to payers throughout the fiscal year using standard payment models (e.g., fee-for-service, Diagnosis-Related Groups), and patient cost-sharing amounts are derived from the prices of the specific services provided on a case-by-case basis. Any potential payment adjustments that reflect the prospectively fixed amount per episode of care are typically processed at the end of the fiscal year and involve monetary transfers only between insurers and providers.

The fact that episode-based payment models can be implemented without impacting how patient cost-sharing amounts are determined highlights the independence between provider payment models and patient cost-sharing models. Thus, **the episode-based cost-sharing model could be implemented without impacting provider payment models but would likely increase the collection of patient cost-sharing (as the out-of-pocket amounts would be "smoothed" over a large number of beneficiaries) and reduce administrative efforts.** Nevertheless, the implementation of the episode-based cost-sharing model should be especially seamless along existing episode-based provider payment models because, in these instances, payers have already established definitions and payment levels for health care episodes, which could be extended to the determination of patient cost-sharing.

Certainty About Out-of-Pocket Costs

A key feature of episode-based cost-sharing is that patients would obtain a prospectively guaranteed amount of out-of-pocket cost for a defined health care encounter or episode. A recent survey of insured American adults documented a strong preference for cost-sharing models that prospectively guarantee out-of-pocket costs for entire care episodes when compared to the status quo, under which the amounts are not determined until after care has been delivered (40).

Transparency: Empowerment of Patients to be Informed Consumers

Although health care in the US is primarily market-driven, patients cannot act as informed consumers as in markets for other goods and services, partially because the prices of health care services are prospectively difficult to obtain (29). Recent federal health care price transparency efforts (e.g., the Centers for Medicare & Medicaid Services Hospital Price Transparency Rule, the Transparency in Coverage Act) fell short of their intended goal as the provided price estimates are often incomplete and unreliable because patients are frequently charged for services not included in the quotes (31,32,41–45). Moreover, the disclosed amounts under existing price transparency rules are usually the negotiated payment rates between health care providers and health plans without accounting for person-specific health insurance benefits.

Because health care consumers are primarily interested in knowing how much receiving a specific service would cost them personally—as opposed to the amount that their insurance plan will pay —the prices currently provided are not completely relevant to consumer decision-making. The provision of guaranteed out-of-pocket cost information via the episode-based cost-sharing model before care is delivered would empower patients to shop for care, make better-informed decisions regarding their provider and treatment options, and maintain control over their out-of-pocket spending (e.g., by being able to plan financially). Such an innovation would considerably advance the ongoing health care price transparency movement and likely lead to lower rates of unpaid medical costs and future medical debt. More importantly, the clinical and financial benefits resulting from the implementation of such a policy are far-reaching, in that the crushing burden of medical debt would be mitigated and the significant proportion of Americans who forego care because of cost would be reduced, leading to improved population health.

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Expanded Use of Effective Medical Services

Some patients may forgo or delay the use of clinically appropriate, effective care due to the mere possibility of incurring an unaffordable out-of-pocket cost. For example, suppose a health care episode may result in an out-of-pocket cost of $100 in 90% of cases (e.g., an episode with no clinical complications) and $1,000 in the remaining 10% of cases (e.g., when there are clinical complications). Given that there is no way to know before the episode of care whether an individual would end up experiencing clinical complications or not, financially risk-averse patients who cannot afford to pay more than $500 may decide to forgo this care even though the episode would likely be affordable for them.

Prospectively guaranteeing patients' out-of-pocket costs would eliminate this financial risk for patients, and consequently, the improved cost-related certainty may increase the use of effective medical care. One recent study reported that prospectively providing patients with out-of-pocket cost information did not increase the likelihood of cancellation of or no-show at scheduled appointments (46), suggesting that consumers are not averse to learning their cost-sharing obligations prior to care delivery.

Reduced Likelihood of Incurring Very High Out-of-Pocket Costs and Related Medical Debt

Unexpected medical bills are a major contributor to the incidence of medical debt (16), and therefore, may be viewed as a benefit design problem. Although many unexpected medical bills likely stem from unanticipated health issues, patients frequently incur medical debt even for planned health care encounters. For example, having given birth in the previous year is associated with a five percentage point higher likelihood (20% versus 15%) of carrying medical debt among women aged 18–49 years (47). Episode-based cost-sharing would reduce the likelihood of incurring medical debt for planned episodes of care by eliminating the possibility of incurring unexpected costs due to complications or other reasons for higher-than-expected treatment intensity that the patient did not choose.

Improved Revenue Stream

Uncollected receivables for health care providers are disproportionately concentrated among patients with high account balances—often those who unexpectedly required intensive and costly care (6,35). Because episode-based cost-sharing would redistribute cost-sharing obligations more equitably across the patient population, it would effectively reduce the variation in patient cost burdens, making it more likely that patients can meet their financial obligations. As a result, providers would experience fewer unpaid balances (frequently of relatively high amounts) and a higher overall collection rate.

Episode-based cost-sharing would also improve price transparency by providing patients with information on their out-of-pocket cost responsibilities before care is delivered. This prospective clarity would give patients the opportunity to plan for and consent to their financial responsibility upfront, which would increase the likelihood of full and timely payment, thereby further improving health care providers' revenue streams.

Decreased Administrative Burden

In addition to increasing providers' revenue through improved collection rates, episode-based cost-sharing would also likely reduce administrative burden and associated costs for health care providers. The improved collection rate would directly reduce health care providers' need to spend resources on actively collecting receivables or exploring alternative solutions for recovering at least portions of receivables, such as factoring.

Collectively, the improved revenue stream and simultaneously decreased administrative burden and operating costs would increase health care providers' profit margins.

Reduced Barriers to Care for Plan Members with Minimal Tradeoffs

Although employers certainly do not intend for their plan benefit designs to expose employees to considerable risk of falling into medical debt, this risk has been increasingly prevalent due to high deductibles and out-of-pocket obligations that far exceed the average household savings. Employers that would like to alleviate their employees from the burden of high health care costs, however, face a difficult choice between inherent tradeoffs. Reducing patient exposure to the cost of their care by lowering out-of-pocket cost maximums, deductibles, or co-insurance rates necessarily translates to increased health plan payouts—a cost that would have to be covered either by higher employee contributions toward health insurance premiums or assumed by the employer. The former would likely upset employees, and the latter may not be financially feasible for employers with tight operating margins. Moreover, reduced patient exposure to health care costs could lead to moral hazard (i.e., increased consumption of low-value care) and consequently further increase health plan payouts.

Episode-based cost-sharing would reduce barriers to care for plan members who would not have to worry about incurring unexpected, unaffordable out-of-pocket costs, and this improved access to care would not need to come at the expense of increased plan spending. By requiring patients to pay cost-sharing derived from a statistical expectation of treatment intensity, the reduction in out-of-pocket costs for the minority of patients who need high-intensity treatment would be offset by slightly increased out-of-pocket costs for the majority of patients who need only low-intensity treatment. Moreover, episode-based cost-sharing would preserve the standard features of health insurance benefit design (e.g., deductibles and co-insurance) to minimize moral hazard and incentivize patients to choose high-value services from high-value providers.

The improved access to care would likely translate into increased employee satisfaction with employment benefits, which could help employers with employee recruitment and retention, ultimately leading to improved population health.

Healthier Employees

With improved access to care, health plan beneficiaries would be less likely to postpone, or delay needed medical care. As a result, employers could expect a healthier employee population, manifesting in fewer requests for medical leave, shorter durations of medical leave, and higher employee productivity. These benefits could also translate into improved employee retention.

Potentially Lower Health Care Prices

Protecting patients from unexpected out-of-pocket costs would increase health care providers' collection of receivables, as most bad debt originates from patient accounts with large outstanding balances (6). The improved collection and related reduced administrative expenses would then give employers a strong argument for negotiating lower prices of health care services. Lower health care prices, however, may not materialize in decreased spending because the improved access to care due to more certainty and transparency for patients—as well as due to the potentially lower prices—would simultaneously likely increase health care utilization.

Selection of Health Care Episodes and Their Definitions

Episode-based cost-sharing would be best suited for health care episodes that are relatively common, span a limited time frame, and during which some patients receive low-intensity treatment and some—by virtue of chance—receive high-intensity treatment, which subsequently has non-negligible financial implications for patients. Several health care scenarios are already included in episode-based payment programs, including cardiac pacemaker implantation, childbirth, gall bladder removal, cataract surgery, hernia repair, hysterectomy, joint replacement, and many others.

A key barrier to implementing the episode-based cost-sharing model beyond those included in episode-based payment programs would be clinical settings for which the exact definition of a health care episode has not been established (i.e., when does an episode start and end, and which health care services it may comprise). The challenge of defining bundles is not new, and it is not specific to episode-based cost-sharing. For example, if an episode of care involves only an inpatient admission, the definition of the episode would be relatively straightforward, as it would include all services provided to the patient between admission and discharge. However, if an episode includes temporally distinct health care encounters (e.g., antepartum/postpartum care in case of childbirth, preoperative medical evaluation before surgery/postoperative care), not all services that the patient receives during the episode duration would necessarily be attributable to the episode.

For this reason, **it is most straightforward to initially apply the episode-based cost-sharing model to care episodes that have already been established for other purposes.** Specifically, the Centers for Medicare and Medicaid Services have defined several episodes of care for the implementation of bundled payment models, and the State of Maryland has adopted the Patient-Centered Episode System (PACES) for its bundled payment program, which includes procedure-based and condition-based episodes spanning both inpatient and outpatient care (48,49). Lessons learned from these scenarios could aid in the eventual expansion of the episode-based cost-sharing model to other types of episodes. Moreover, other open-access health care service groupers are becoming increasingly available and could further alleviate the problem of episode definition for purposes of the episode-based cost-haring model implementation. We have estimated that approximately 200

common conditions and procedures can be priced prospectively, and therefore, the portion owed by the plan and the portion owed by the plan member can be determined.

Increased Complexity of Health Plan Benefit Designs

Health insurance plans are incredibly complex products that many consumers do not fully understand (10,50). Although one of the goals of episode-based cost-sharing is to provide patients with a simpler, more streamlined experience, it would be an additional feature of a health plan benefit design that would apply to some—but not all—episodes of care, making the benefit design potentially more complex in some ways, but more beneficiary-friendly in other ways. Thus, health plans that implement episode-based cost-sharing would need to inform and educate their members about this innovation, mainly how it works, to which episodes of care it applies, and to which it does not.

Increased Cost-Sharing for Patients Who Experience No Complications

The inherent tradeoff in episode-based cost-sharing—a prospectively fixed amount of out-of-pocket costs per episode of care regardless of the occurrence of unexpected clinical complications—is that while patients who have the "bad luck" of experiencing clinical complications would incur lower out-of-pocket costs than under the status quo, those who do not experience complications would incur higher out-of-pocket costs than under the status quo. It is possible that patients who were able to afford to pay their cost-sharing amounts under the status quo, because they did not experience clinical complications, would be unable to afford the slightly increased amounts under episode-based cost-sharing. This potential pitfall deserves scrutiny during the initial phases of implementation.

Nevertheless, the low actuarial values of many existing health plans, which expose patients to large portions of the costs of their care, disproportionately affect beneficiaries who are in poor health, leading to inequitable distribution of the health care cost burden across plan members. Because individuals who are in poor health are more likely to experience clinical complications during planned episodes of care and, thus, under the status quo, incur higher out-of-pocket costs, episode-based cost-sharing would help reduce this inequity. Moreover, a recent survey of American adults documented that cost-sharing models that prospectively guarantee out-of-pocket costs are preferred to the status quo in spite of slightly increased costs for certain patient groups (40).

Challenges of Incorporating Episode-Based Cost-Sharing into High-Deductible Health Plans

The current minimum deductibles in 2025 for high-deductible health plans (HDHP) are $1,650 for individuals and $3,300 for families (51). Many plans have substantially higher deductibles. A recent Federal Reserve study reported that 40% of Americans do not even have $400 to cover unexpected expenses, implying that high deductibles limit access to services that are deemed critical for patients' well-being (52). Driven in part by increasing health plan deductibles, 1 in 3 US adults reported not receiving medical care because of cost (53).

Policy solutions are available to mitigate this problem, some of which were motivated by the COVID-19 pandemic (54). Until 2019, the definition of preventive care that could be covered prior to meeting the HDHP deductible was limited to services specified by the preventive services provision of the ACA, such as vaccines, counseling services, or screenings. By IRS regulations, pre-deductible coverage is not allowed for any services used to treat an existing injury, illness, or condition. A 2019 notice from the Internal Revenue Service (IRS 2019-45) allowed high-deductible health plans the flexibility to voluntarily cover certain services used to manage chronic diseases, such as heart disease, asthma, and diabetes, before patients met their deductible (54,55). Several federal policies such as Internal Revenue Service Notice 2020-15, "HDHPs and Expenses Related to COVID-19," and the Coronavirus Aid, Relief, and Economic Security (CARES) Act required coverage of COVID-19 vaccines, tests and screening without patient cost-sharing (54), and all telemedicine services to be covered on a pre-deductible basis (i.e., not limited to COVID-19 visits). The IRS guidance was further extended in 2024 (IRS 2024-75) to include oral contraceptives, male condoms, continuous glucose monitors, and additional breast cancer screening modalities (56). Research from the Employee Benefit Research Institute reported that expanding pre-deductible coverage in health savings account-eligible health plans increased utilization of those services before meeting the plan's deductible (57).

The cost of pre-deductible coverage is minimal; an actuarial analysis of providing pre-deductible coverage for more than 50 common drug classes estimated an increase in premiums of less than 2% (58). Instead of raising premiums or increasing deductibles to offset the added costs of more generous coverage for high-value, cost effective services, plan sponsors could use savings that result from deterred access to low-value care, defined as services that have no demonstrated clinical benefit (59). A novel benefit design template using value-based insurance design principles, referred to as V-BID X, reduces spending on low-value care (by increasing

cost-sharing or eliminating coverage), the savings incurred from which are used to enhance access (by lowering or eliminating cost-sharing) to high-value services without increasing premiums or deductibles (60). The CMS 2021 Notice of Benefit and Payment Parameters final rule strongly recommended that federally qualified health plans incorporate V-BID X (61).

Recommendations for Employers

1. Elicit health plan beneficiaries' preferences for episode-based cost-sharing using focus groups or similar methods

2. Pilot test the episode-based cost-sharing model for a limited number of types of health care episodes

3. Assess the feasibility of implementing the episode-based cost-sharing model and its impacts on health care use, patients' ability to pay medical bills, and provider revenue

4. Educate beneficiaries on the availability of episode-based cost-sharing for certain types of episodes

5. Make use of the increased protection of plan members from unexpected high medical costs in the negotiation of prices of health care services with health care providers

Public Policy Recommendations

1. As part of ongoing health care price transparency efforts, support innovative approaches to prospectively providing patients with reliable cost information

2. Increase the number of services with low or no out-of-pocket costs

3. Define health care services as episodes, not just the first service in a sequence

4. Encourage the use of episode-based provider payment models

5. Set deductible limits based on patient income

6. Expand out-of-pocket cost caps

CONCLUSION

Uncertainty of out-of-pocket costs has important—and often negative—consequences across the entire spectrum of health care stakeholders. Episode-based cost-sharing is an innovative concept that has the potential to improve the certainty of the financial aspect of health care delivery, yielding important clinical and financial benefits for patients, providers, and payers. Under this model, patients would obtain a prospectively guaranteed out-of-pocket cost amount for a given episode of care, which would inherently protect them from incurring unexpectedly high medical bills due to factors outside of their control, such as experiencing unanticipated clinical complications. This win-win-win 1) protects patients against unexpected medical bills and potentially increases the uptake of needed, high-value care, and 2) reduces the incidence of bad medical debt, thereby improving health care providers' revenue from negotiated rates and decreasing administrative costs associated with debt collection. In addition to the significant health and financial advantages experienced by employees stemming from the guaranteeing of out-of-pocket medical costs, employers could achieve the additional benefit of downward pressure on health care prices that may result from more efficient reimbursement of providers.

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Diagnosis-Related Group (DRG)

A patient classification system designed for hospital reimbursement purposes that groups patients of similar clinical complexity within hospital admissions.

Episode-Based Cost-Sharing

An innovative approach to determining and guaranteeing patients' out-of-pocket costs before care has been delivered that aligns well with existing US health care system structures, including provider payment mechanisms and health insurance benefit designs.

Episode-Based Payment

A health care payment model under which a payer pays a single, pre-determined price for all services—potentially delivered by a variety of health care providers—a patient needs during a specific episode of care. This model is often referred to as "bundled payment."

Fee-for-Service

A basic health care payment model under which health care providers are paid for each service performed.

Healthcare Common Procedure Coding System (HCPCS)

A listing of descriptive terms and identifying codes for reporting medical services and procedures.