

Cost-Shifting and Cost-Cutting as Joint and Mutually Reinforcing Strategies in the Financial Management of Hospitals and Similar Healthcare Organizations

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Abstract

This study examines cost-shifting in private, investor-owned Pennsylvania hospitals to construct a model of joint cost-shifting and cost-cutting strategies in healthcare finance. Rather than add to the debate about the cause, magnitude, and intensity of cost-shifting, which this study reviews and for which the jury is still out, it addresses questions about why, when, and how cost-cutting might be complementary to cost-shifting. It suggests that cost-cutting may be blended with cost-shifting when overheads and transaction costs (typically for administration and regulatory compliance) are substantial and cannot be cross-subsidized. Cost-cutting might also blend well where increased charges or list prices to offset reimbursement shortfalls and uncollectible payments are capped by payers who will have to bear the financial burden. The net profit (income) generated from the former method — which this study refers to as *indirect* (or “backdoor”) cost-cutting — represents a variable fraction of the original cost of care. That percentage may be adjusted depending on the amount of operating expenses that needs to be covered and based on successful (re)negotiation with payers. The latter method — which refers to *direct* cost-cutting — seeks at minimum a break-even outcome. A hospital will not likely realize any net gain under the direct method, but it totally eliminates the net loss arising from price-capping. This it achieves by reducing the cost of care to patient cohorts. Joint and mutually reinforcing cost-shifting and cost-cutting strategies should nonetheless be considered along with other viable options or alternatives, and in light of the reciprocal choices and actions that payers of the new or additional charges are bound to make.

Keywords: Cost of care; charges; margin; net profit (income); patient cohort; pricing; reimbursement; revenue; transaction costs

JEL classifications: G3; I13; I18; I19

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Introduction

Although cost-shifting in the healthcare industry has been discussed and debated, it remains today a controversial concept and strategy from a financial, political, public policy, and welfare standpoint. As health expenditures continue to rise both microeconomically (household and firm level) and macroeconomically (vis-a-vis GDP), and the United States federal government further reins in Medicare and Medicaid costs, the issue seems to command even greater attention from healthcare, legislative, and cause-oriented circles more than ever before.¹

Cost-shifting commonly refers to the practice of charging certain private payers more for the same healthcare treatments and services to make up for reimbursement shortfalls, given that hospital costs, including staffing, supplies, equipment, and space are generally fixed. Cost-shifting can also make up for uncompensated care from uncollected debt and charity (indigent) care, regardless of how negligible these may be.² In those instances, select payers subsidize non-payers and the uninsured.

However, cost-shifting does not usually imply cross-subsidization. From a healthcare financial standpoint, the latter is generally understood to refer to the allocation and transfer of a certain portion of hospital revenues collected from profitable practice areas or departments and patients (e.g., surgical care and cardiology) to less profitable ones (e.g., psychiatry and substance abuse). While cross-subsidization may be more widely used in hospitals, it differs from cost-shifting in that it does not automatically lead a hospital or healthcare organization to charge other departments or patients more simply because some departments or patients are less profitable, as cost shifting is bound to do.

Neither is cost-shifting synonymous with price discrimination, although the two are related. In price discrimination, different payers are treated differently for pricing purposes based on their respective market power or influence. Thus, the intensity of price competition for large employers, or among managed care plans (in placing their enrollees in a particular provider network), sharply contrasts with some patients or employers having to individually negotiate charges for the same healthcare treatments and services. Price discrimination does not imply any causal connection between the different, profit-

¹ Darden M, McCarthy I, Barrette E (2018). Who pays in pay for performance? Evidence from hospital pricing. *NBER Working Paper No. 24304*. Cambridge, MA: National Bureau of Economic Research.

² Coughlin TA et al. (2014). *Uncompensated care for the uninsured in 2013: A detailed examination*. Washington D.C.: Urban Institute. Available from: <https://www.kff.org/uninsured/report/uncompensated-care-for-the-uninsured-in-2013-a-detailed-examination/> (accessed January 14, 2020).

maximizing prices each payer or payer class (cohort) is charged.³ On the other hand, while it may imply some form of price-discrimination, cost-shifting is based on the price that one payer (such as a private or commercial insurer) is charged to make up for the lower price contracted with another payer (e.g., social insurance), and the payment shortfalls arising therefrom.^{4, 5} One health insurance CEO illustrates the causality by means of a balloon analogy: “If you clamp down on one side of a balloon, the other side just gets bigger.”⁶

The debate over cost-shifting in hospitals and other healthcare organizations — both theoretical and practical — is multi-faceted. The academic literature has had its own share of qualifications and reversals. Is the effect of cost-shifting minimal in absolute terms and are occurrence rates relatively low, in comparison to what had been widely assumed and reported three decades earlier? One literature review finds for the affirmative,⁷ while another study reports that Medicare in-patient reimbursement rates actually lead to lower private payment rates.⁸ Market (pricing) competition seems to account for a hospital’s general aversion to cost-shifting.^{7, 8} The implication is that cost-shifting might be politically useful in fostering support for larger payments or to reverse declining payments from social insurance programs, but it is economically flawed.

Yet, others report mixed findings. There is evidence that private insurance companies do not resist hospital cost-shifting and can, in fact, be financially motivated to overpay hospitals. This is because most employer-sponsored private health insurance are covered entirely by employers who self-insure, while a private insurer’s revenue is tied directly to its expenses. Hence, the more health insurance companies spend each year,

³ Reinhardt UE (2006). The pricing of U.S. hospital services: Chaos behind a veil of secrecy. *Health Affairs*, 25(1): 57–69.

⁴ Morrissey MA (1994). *Cost shifting in health care: Separating evidence from rhetoric*. Washington, DC: AEI Press.

⁵ Ginsburg PB (2003). Can hospitals and physicians shift the effects of cuts in Medicare reimbursement to private payers. *Health Affairs*, 22(Supp1): 472-479.

⁶ Arnst C, Sasseen J (2009). Why business fears the public option. *Bloomberg Businessweek*, October 1. Available at: <https://www.bloomberg.com/news/articles/2009-10-01/why-business-fears-the-public-option> (accessed January 26, 2020).

⁷ Frakt AB (2011). How much do hospitals cost shift? A review of the evidence. *Milbank Quarterly*, 89(1): 90–130.

⁸ White C (2013). Contrary to cost-shift theory, lower Medicare hospital payment rates for inpatient care lead to lower private payment rates. *Health Affairs*, 32(5): 935-943.

the more revenue they earn via premium increases the following year.⁹ A recent study of value-based and cost-containment measures introduced under the Affordable Care Act (ACA) of 2010¹⁰ found that nearly 70 percent of the costs of penalties from hospital non-compliance with these measures are shifted to private insurance patients in the form of higher private insurance reimbursements to hospitals. These increased payments are unrelated to hospital quality improvements, changes in treatment intensity, or changes in service mix.¹ Uncompensated care may, in some instances, factor into the cost-shifting equation.¹¹ And cost-shifting from one time frame or market does not apply at another time or place. Instead, there is growing empirical evidence that private and public prices and margins for provider products and services reciprocally influence each other.⁷ These mixed results have led one economist to concede that “[t]o the extent that hospitals still have some unexploited market power, perhaps some cost shifting is possible, but ... it is likely to be at a rate closer to twenty cents on the dollar than the dollar-for-dollar rate suggested by industry-funded reports.”⁷ (p.123)

In addition to cost-shifting, this study inquires into one under-explored aspect of shortfall recovery: cost-cutting. Cost-cutting measures are often designed in response to the refusal of payers to pay increased charges to make up for the healthcare organization’s revenue deficit from reimbursement shortfalls (in which case payers might simply opt for other insurers). It could also be because third-party payers refuse to pay for costs unrelated to the products and services received by their insured members.¹²

Some of the academic literature suggest that cost-shifting at a low rate might depend on whether the vast majority of public payer shortfalls are or can be accommodated by cost-cutting, rather than cost-shifting.⁷ The greatest cost-shifting, in fact, occurs in hospitals with higher shares of private insurance patients.¹ One study reports a slightly nuanced finding: Reduced Medicare payments were offset dollar-for-dollar by price increases to private insurers in the 1980s. However, just a decade later, Medicare payment reductions had directly resulted in much lower hospital profits and directly triggered reductions in beds and nurses (but not high-tech equipment purchases), assum-

⁹ Belk D (2017). True cost of health-care. Available at: http://truecostofhealthcare.org/hospital_financial_analysis/ (accessed January 12, 2020).

¹⁰ *Public Law 111-148* (2010), An act entitled The Patient Protection and Affordable Care Act, 124 Stat. 119 through 124 Stat. 1025, March 23.

¹¹ Congressional Budget Office (2018). *Options for reducing the deficit, 2019-2028: Reduce Medicare’s coverage of bad debt*. Available at: <https://www.cbo.gov/budget-options/2018/54734> (accessed January 27, 2020).

¹² Nowicki M (2018). *Introduction to the financial management of healthcare organizations*, 7th ed. Chicago: Health Administration Press/AUPHA Press.

ing the affected hospital had not close down.¹³ Then, as now, because few studies have examined cost-shifting in specific, local healthcare markets,¹⁴ the joint effects of cost-shifting and cost-cutting have not been sufficiently identified and analyzed.

Premises considered, this study explores the interdependency of cost-shifting and cost-cutting measures against the backdrop of increasing cost of care, declining reimbursements, and profit (or income) losses, whether actual or potential. In doing so, it draws attention to the complementarity of financing options that otherwise tend to be disregarded or deemed mutually exclusive. From there, it discusses their theoretical and practical implications for the financial management of healthcare organizations.

Methods

Appendix A shows the nine (10.5 percent) out of 86 for-profit or “investor-owned” hospitals in the Commonwealth of Pennsylvania, as of July 2018, that we selected at random from a combined spreadsheet list generated from the Commonwealth of Pennsylvania Department of Health¹⁵ and The Hospital and Healthsystem Association of Pennsylvania (HAP).¹⁶ These two spreadsheet lists were matched to eliminate duplicate and incomplete entries. Pennsylvania’s 86 for-profit hospitals constitute 34.5 percent of the 249 state-licensed hospitals and VA-operated hospitals in July 2018. The average licensed bed capacity for these 86 for-profit hospitals was 100. The average was 185 licensed beds for our nine sampled hospitals, which reported an average total margin of \$7.98 percent in 2018 (\$7.98 left over, post-tax, for each \$100 in revenues). Of the remaining hospitals, 148 (59.5 percent) were non-profit and 15 (6 percent) were public hospitals owned by the federal government, state government, and city of Philadelphia.^{15, 16}

Random hospital selection continued until we were able to identify from the lists nine hospitals that met our predetermined criteria and 10 percent minimum target for investor-owned hospitals in the state. This meant gathering preliminary information from

¹³ Cutler DM (1998). Cost shifting or cost cutting?: The incidence of reductions in Medicare payments. *Tax Policy and the Economy*, 12(1998): 1-27.

¹⁴ Johnson AN, Aquilina D (1982). The cost shifting issue. *Health Affairs*, 1(4): 101-106.

¹⁵ Commonwealth of Pennsylvania, Department of Health (2016). *Hospital Reports* (Pennsylvania Health Statistics). Available at: <https://www.health.pa.gov/topics/HealthStatistics/Pages/health-statistics.aspx#.WqBIToJG3MU> (accessed July 30, 2019).

¹⁶ The Hospital & Healthsystem Association of Pennsylvania (2018). *Interactive Hospital Map: Hospitals and Health Systems of Pennsylvania*. Available at: HAPonline.org (accessed July 29, 2019).

a larger number of hospitals based on our three-fold predetermined criteria: 1) a payer mix that includes Medicare, Medicaid, commercially insured (whether employer-provided or self-purchased), and self-paying in-patients; 2) uncompensated care from bad debt, including unpaid out-of-pocket costs, and/or charity care; and 3) adoption by the hospital of cost-shifting and cost-cutting initiatives to address reimbursement shortfalls and other sources of in-patient revenue loss.

Data gathered in 2018 from these nine hospitals was aggregated and averaged to allow us to construct a simplified and idealized model of joint and mutually reinforcing cost-cutting and cost-shifting in the for-profit hospital sector. Our model is based on a payer mix of 1,000 in-patients during a hypothetical hospital fiscal year. Cost of care (actual expenses incurred by the hospital) for each patient was unitized and contained to \$1,000 for said fiscal year (i.e., before adding in operating expenses). Cost of care was initially held equal to charges (or list prices) either billed to payers or treated as uncollectible before cost-cutting was initiated. We make no representativeness presumption about our randomly selected hospitals. They served mainly to identify and classify costs, charges, revenues, and profits (or income) relative to various patient cohorts in constructing our cost-shifting and cost-cutting model.

Key Variables and Premises

Time frame

In taking into account the time element in our hospital model, we consider the long-run as a period in which factors of production and costs for treatments and services are variable.¹⁷ In the long run, hospitals are able to better adjust their costs after cost-shifting and cost-cutting (and other recovery measures) based on costs, charges, revenues, and profits from an operating year. Conversely, in the short run, they are only able to influence prices and charges largely through adjustments made to production levels. Fixed costs (salaries and wages, overheads, administrative expenses, etc.), for example, are short-run and tend to be time-related.

Government Reimbursements

Social insurance (Medicare and Medicaid, including the state Children's Health Insurance Program or CHIP) reimburse at fixed prices set by law that are considerably less than the actual cost of patient care.¹⁸ The trend among our nine surveyed hospitals also

¹⁷ Grant M (2019). Long run. *Investopedia*, May 14. Available at: <https://www.investopedia.com/terms/l/longrun.asp> (accessed December 27, 2019).

¹⁸ Reiter KL, Song PH (2018). *Gapenski's fundamentals of healthcare finance*, 3rd ed. Chicago: Health Administration Press.

shows declining revenues from social insurance at least over the last five years, since fiscal year 2013-2014. The prospective payment system under Medicare exemplifies this trend, since it is based on predetermined, fixed amounts for specific services under a classification system like DRGs (diagnosis-related groups) for in-patient services.¹⁸ Medicare and Medicaid make up the largest sources of financing losses at our surveyed hospitals (as well as practically every other hospital reported in the academic literature). Joint cost-shifting and cost-cutting in our model is designed to offset these losses by re-assigning them to certain patient cohorts first, and then addressing any necessary expenditure cuts. For modeling purposes, we make no judgment as to the market power of providers or the net burden of the extra charges on payers, which is often estimated by economists using the actual amount by which annual premiums increase from cost-shifting.¹⁹ But any added financial burden might also be moderated, among others, by government subsidization of the costs that hospitals would otherwise be inclined to shift.

Uncompensated care

Bad debt, unpaid out-of-pocket expenses, and indigent care, regardless of how negligible they may be, are treated as equal targets of cost-shifting in our model, given the trend nationwide and among the nine surveyed hospitals.^{2, 11} In controlling for extraneous factors, our model does not identify a crossover point in which these collective sources of uncompensated care might trigger cost-shifting and/or cost-cutting.

Price differentials

Price discrimination is excluded in our model, since pricing and charging under that strategy are based on what the market can bear relative to a profit-maximizing price charged to each payer. However, we retained three price discrimination premises which are applicable to cost-shifting: 1) Hospitals may charge different payers different prices (including charges after a negotiated discount) for the same treatments and services, as some payers are more price-sensitive; 2) The higher price charged to some payers (including self-payers) should average the relationship of cost to treatment or service for each patient served; 3) The higher amount paid by certain payers might be intended not only to address below-cost reimbursements, but also the volume of payers and the desired total margin, especially of a for-profit hospital or healthcare organization. To simplify these price differentials, our model does not include any contractual allowances, which are different from underpayments or shortfalls, and which represent the difference between hospital charges and social insurance payments.

The propensity to shift and cut costs tend to increase when fixed costs rise (especially overheads and administrative expenses), the payer mix changes, the number of less price-sensitive payers grow, which might cause hospitals to raise their mark-ups on oth-

¹⁹ Cogan JF, Hubbard RG, Kessler D (2011). 'ObamaCare and the truth about 'cost shifting.' *Wall Street Journal*, March 11. Available at: <https://www.wsj.com/articles/SB10001424052748703560404576189012255187694> (accessed December 29, 2019).

er payers,²⁰ and/or a hospital's or healthcare organization's market power (e.g., to negotiate better rates with third-parties) considerably weakens.⁷

Joint effect

Some studies suggest that hospital cost-cutting, if done efficiently, could absorb reimbursement shortfalls from either public or private payers. For this reason, capping hospital reimbursement rates by the federal government has been advanced. Yet, the converse has also been vigorously asserted: Cost-shifting is unfair and is the inevitable consequence when public and private payers fail to creatively restructure their reimbursement policies, so that they can appropriately reward cost-effective providers.¹⁴ This view has been partly operationalized in terms of the value-based payments and patient readmission reduction program launched under the ACA, albeit some in ways that are yet to be understood.^{21, 22}

The effects of cost-shifting and/or cost-cutting from either causality has time and again been raised and debated. It is not our purpose here to inquire about any fundamental changes that may be necessary to reform reimbursement policies or encourage alternative measures to cost-shifting. Rather, we focus on the joint effects of cost-shifting and cost-cutting on revenue collection and net profit, *ceteris paribus*.

Cost-Shifting by Payer Mix

Table 1 shows the payer mix in our model Pennsylvania investor-owned hospital, with 1,000 in-patients and \$1,000 in total cost of care per patient. Cost of care covers bed days, supplies, therapies, labs, MRI and CT, emergency room, drugs, operating room and services.²³ We made hospital-billed charges (list prices) equal to cost of care for

²⁰ Feldstein PJ (2015). *Health Policy Issues: An Economic Perspective*, 6th ed. Chicago: Health Administration Press.

²¹ LaPointe J (2016). How the Affordable Care Act impacted healthcare revenue cycle. *Revcycleintelligence*, August 18. Available at: <https://revcycleintelligence.com/news/how-the-affordable-care-act-impacted-healthcare-revenue-cycle> (accessed December 30, 2019).

²² Fried BM, Sherer JD (2016). Value based reimbursement: The rock thrown into the health care pond. *Health Affairs Blog*, July 8. Available at: <https://www.healthaffairs.org/doi/10.1377/hblog20160708.055764/full/> (accessed December 30, 2019).

²³ Fuller RL (2013). *An analysis of real price effects resulting from charge setting practices in the US hospital sector*. Schnecksville, PA: Jayne Koskinas and Ted Giovanis Foundation for Health and Policy. Available at: http://jktgfoundation.org/data/price%20setting%20practices%20in%20the%20US%20hospital%20sector_FINAL.pdf (accessed February 2, 2020).

control. This parity allows for the initial exclusion of overhead and transaction costs as well as any hospital mark-ups,²³ until the succeeding section on cost-cutting. In-patient revenues are the payments received by the hospital from fixed reimbursement rates, price-discounted rates negotiated directly with commercial insurers, subscriber fees for capitation-based plans, and other financing arrangements. Third-party reimbursements include amounts for every service delivered (fee-for-service), for each patient day in the

Table 1
Net profit (income) based on cost-charge parity
(n=1,000)

Patient cohort	# Patients (%)	Costs (@\$1,000 per patient)	Charges (@\$1,000 per patient)	In-patient revenues (% of costs)	Net profit (income)
Medicare	219 (21.9)	219,000	219,000	186,369 (85.1)	−32,631
Medicaid + CHIP	134 (13.4)	134,000	134,000	107,334 (80.1)	−26,666
Managed care (non-capitated)	230 (23)	230,000	230,000	207,000 (90)	−23,000
Managed care (capitated)	145 (14.5)	145,000	145,000	117,740 (81.2)	−27,260
Private insurance (full pay)	116 (11.6)	116,000	116,000	116,000 (100)	0
Other third-parties	28 (2.8)	28,000	28,000	27,804 (99.3)	−196
Self-pay	106 (10.6)	106,000	106,000	106,000 (100)	0
Bad debt	12 (1.2)	12,000	12,000	0	−12,000
Charity care	10 (1)	10,000	10,000	0	−10,000
Total	1,000 (100)	1,000,000	1,000,000	868,247 (86.8)	−131,753

hospital (per diem), for each episode of hospitalization (e.g., DRGs), or for each patient counted under hospital care in a given time frame (capitation).²³

Medicare, Medicaid, and CHIP cover approximately one out of every three patients in our model. These social insurance programs have policies to control pricing, including the prospective payment system, physician fee freezes, and non-compliance penalties under the ACA's incentive programs. The average reimbursements to our sampled Pennsylvania hospitals are 85 percent for Medicare patients and 80 percent for Medicaid and CHIP patients, which closely resemble statewide trends in Pennsylvania.^{24, 25} Reimbursement shortfalls from these programs create significant financial pressure on providers to stop accepting patients, or to at least reduce patient volume, on Medicare, and more so on Medicaid. If trends persist, some Pennsylvania healthcare agencies are concerned that Medicare and Medicaid patients will eventually crowd out urgent care centers and hospital emergency rooms.

Private or commercial insurance — mostly employer-provided — cover half of all patients in our simplified model. Because hospitals in Pennsylvania and every other state charge different rates to different payers, their list prices bear little connection to what insurers and patients end up paying. It is also the case nationwide.¹⁸ Lower than cost reimbursements from of many insurers are often the byproduct of discounts obtained from their substantial bargaining and contracting power. For this reason, we divided privately insured patients into three main classes in Table 1: 1) non-capitated managed care plans (mostly PPO, POS, EPO) that pay charges minus rate discounts, with an average weighted discount across the nine sampled hospitals of about 90 percent; 2) capitation-based managed care plans (the vast majority of which are HMOs) whose average weighted per subscriber price is approximately \$830; and 3) private or commercial health insurance which is billed and pays at full charge. In Pennsylvania, managed care refers to capitated and non-capitated plans alike, including HMOs, GPPOs (“Gatekeeper” Preferred Provider Organizations), IDSs (Integrated Delivery Systems), Hospital Plan Corporations, and Professional Health Services Plan Corporations.²⁶

A small number of patients, comprising less than 3 percent in our model, are paid for by other third-parties. Included in this cohort are payments from Worker’s Compensation,

²⁴ Heath S (2019). Hospital payment disparities emerge among private payers, Medicare. *Health Payer Intelligence*, May 15. Available at: <https://healthpayerintelligence.com/news/hospital-payment-disparities-emerge-among-private-payers-medicare> (accessed February 3, 2020).

²⁵ Gantz S (2019). Private insurance plans pay hospitals far more than Medicare. Could price transparency fix that? *The Philadelphia Inquirer*, May 9. Available at: <https://www.inquirer.com/health/consumer/hospital-bills-employer-health-plans-medicare-20190509.html> (accessed February 3, 2020).

²⁶ Commonwealth of Pennsylvania (1968). *Public Law 769, No. 240* (The Pennsylvania Code) Title 28 - Health and Safety, 28 PA Code §9.604.

auto insurance settlements, legal liability settlements, a few other health insurance policies (e.g., VA), and healthcare (i.e., public health) expenditures not otherwise categorized. In Pennsylvania, several of these payers, like Worker's Compensation, impose legislative limits, while some rates may be renegotiated in exceptional circumstances. These explain the slightly less than 100 percent collections from the cohort of “other third-parties” in Table 1.

Self-pay patients consist mostly of uninsured, low-income but Medicaid-ineligible residents, foreign visitors, and illegal immigrants. Paradoxically, they also include the wealthiest of patients who seek hospital care regardless of the price. Self-pay charges often reflect the hospital’s “chargemaster” prices (or so-called “sticker” prices). These are the top prices used to negotiate discounts with commercial insurers. Standing at almost 11 percent, the self-pay cohort in Table 1 is expectedly lower than public and not-for-profit hospitals in Pennsylvania. However, their percentage in our model approximates the national average, which has been steadily growing since 2016, following years of decline after the ACA’s enactment in 2010.²⁷ Uninsured Pennsylvania legal residents are required to apply for Pennsylvania Medical Assistance or enroll in the federal or state health insurance marketplace under the ACA.

Uncompensated care, particularly charity care, has been consistently declining in Pennsylvania, which is not the case nationwide.²⁸ The combined total of uncollectible debt, including unpaid out-of-pocket expenses, and charity care (both free and discounted care for low-income and indigent patients) accounts for just slightly over 2 percent of the total patient population as well as hospital costs and charges in Table 1. Actual statewide figures for the cost of uncompensated care relative to net patient revenues have declined each year from 2.81 percent in FY 2013 to 1.74 percent in FY 2017.²⁹ In contrast, the nationwide figure remains stable at 4.2 percent.^{2, 11, 30}

²⁷ Lagasse J (2018). Small percentage of uninsured patients generate most of hospitals' self-pay revenue. *Healthcare Finance News*, December 14. Available at: <https://www.healthcarefinancenews.com/news/small-percentage-uninsured-patients-generate-most-hospitals-self-pay-revenue> (accessed February 1, 2020).

²⁸ Hamill S (2016). Pennsylvania hospitals lag other states in share of charity care for the poor. *Pittsburgh Post-Gazette*, July 30. Available at: <https://www.post-gazette.com/news/health/2016/07/31/Pennsylvania-hospitals-lag-other-states-in-share-of-care-for-the-poor/stories/201605040198> (accessed January 12, 2020).

²⁹ Pennsylvania Health Care Cost Containment Council (2017). PHC4 Releases 2017 Hospital Financial Report – Uncompensated Care Levels Decreased 9.8%. *Financial Analysis 2017*, volume one. Available at: <http://www.phc4.org/reports/fin/17/nr050818.htm> (accessed February 1, 2020).

³⁰ Bannow T (2018). Hospital profits, uncompensated care climb. *Modern Healthcare*, January 6. Available at: <https://www.modernhealthcare.com/article/20180106/NEWS/180109940/hospital-profits-uncompensated-care-climb> (accessed December 11, 2019).

Setting aside commercial insurance discounts, the net impact of social insurance underpayments and uncollectible charges in our model is a profit (income) loss of 13.2 percent, or approximately \$132,000 in patient-related hospital expenses. In seeking to recover that loss in the succeeding fiscal year and given its long-run implications, a hospital will need to initially identify and segregate the patient cohorts that will have to bear and share the loss in terms of increased charges. Medicare, Medicaid, and CHIP prices are set by law and, therefore, quite low. Their margins for hospitals are also declining over time. In addition, there are heavy transaction costs associated with renegotiating and contracting any better prices with the federal and state governments that supply over 30 percent of hospital patients and thus possess practically irreversible “veto” power. On the other hand, managed care on capitation (mostly HMOs) will not pay any more than their subscriber flat dollar rates. Other third-party payers in Table 1 are either on fixed rates or have legislated limits. Further taking out uncompensated care leaves cost recovery to be assumed by non-capitated commercial insurance with discounted rates, private insurers that pay full price, and/or self-payers.

The new cost-to-charge (CC) per patient can be obtained by dividing the profit loss (delete negative sign) in Table 1 by the number of patients per cohort who will be assigned higher charges less applicable discounts. The resulting quotient should be added to the original hospital costs:

$$\begin{aligned}
 \text{CC} &= \frac{\text{Net profit (income) loss} + 1,000}{\# \text{ patients to pay increased charges}(\text{discount})} \\
 &= \frac{131,573 + 1,000}{230(0.90) + 116 + 106} \\
 &= 1,307.12 \text{ (\$1,307 rounded)}
 \end{aligned}$$

Multiplying the CC figure from this cost-shifting equation by the number of patients in each cohort yields Table 2. The profit loss of approximately \$132,000 has been redistributed in Table 2 to two commercially insured patient cohorts and self-payers in order for the hospital to break-even (consider -\$50 only as a “paper loss” due to rounding error). Collections from these cohorts, representing 45.2 percent of the total patient population, range from 118 to 131 percent of the cost of care. The size of this payer subset will ostensibly bear on the amount of the extra charge.

Table 2
New charges and net profit (income) from cost-shifting
(n=1,000)

Patient cohort	# Patients (%)	Costs (@\$1,000 per patient)	Charges (@\$1,307 per patient)	In-patient revenues (% of Costs)	Net profit (income)
Medicare	219 (21.9)	219,000	286,233	186,369 (85.1)	-32,631
Medicaid + CHIP	134 (13.4)	134,000	175,138	107,334 (80.1)	-26,666
Managed care (non-capitated)	230 (23)	230,000	300,610	270,549 (117.6)	40,509
Managed care (capitated)	145 (14.5)	145,000	189,515	117,740 (81.2)	-27,260
Private insurance (full pay)	116 (11.6)	116,000	151,612	151,612 (130.7)	35,612
Other third-parties	28 (2.8)	28,000	36,596	27,804 (99.3)	-196
Self-pay	106 (10.6)	106,000	138,542	138,542 (130.7)	32,542
Bad debt	12 (1.2)	12,000	15,684	0	-12,000
Charity care	10 (1)	10,000	13,070	0	-10,000
Total	1,000 (100)	1,000,000	1,307,000	999,950* (100)	-50*

*Due to rounding error.

Besides offsetting for profit loss, cost-shifting keeps social insurance reimbursements at less than cost of care and managed care on capitation at current subscriber rates. In effect, cost-shifting fully subsidizes uncompensated care. Most for-profit hospitals will typically charge other payer cohorts at higher ranges relative to cost of care, since these

hospitals will at this point already to consider other expenses (e.g., operating costs and margin and intensity of services) and, of course, any mark-ups. In Pennsylvania, for instance, average private hospital charges in 2017 were 169 percent more than Medicare rates or allowable cost.³¹ Be that as it may, the higher new charges in Table 2 (based on \$1,307 per patient) allow for the elimination of the net loss in Table 1, making in-patient revenues essentially at par with cost of care.

Table 2 illuminates cost-shifting as a financial strategy to reverse the adverse effects of underpayments and uncollectible payments. However, some studies assert that the cost-shifting justification for escalating price increases is but a myth. Reductions in hospital in-patient revenue from Medicare have been directly linked to greater declines in total revenues of hospitals, thus suggesting that hospitals do not engage in robust cost-shifting.^{21, 32} Another study reported that a 10 percent reduction in Medicare payments from 1995 to 2009 was associated with a nearly 8 percent reduction in private prices,³³ while a third study revealed that a \$1 reduction in Medicare in-patient revenue correlated with an even larger reduction of \$1.55 in collectible revenue.³⁴ These findings would probably be inconceivable if hospitals were compensating for lower Medicare revenue by charging private insurers and self-payers more.³⁴ One other possible indication of the lower propensity to cost-shift is a study showing that hospitals billed an average of 3.5 times what they actually received in payments for all services rendered (in 2015).⁹ However, this could also be interpreted as the difference between heavily marked-up hospital prices and third-party reimbursement rates.

What seems to largely account for constantly rising charges is monopoly exploitation, especially by so-called “must-have” hospitals and other similarly positioned healthcare organizations.³⁵ As one health economist noted, “[i]n regions of the country where hos-

³¹ Gooch K (2019). What private insurers paid hospitals vs. Medicare rates, by state. *Becker's Hospital CFO Report*. Available at: <https://www.beckershospitalreview.com/finance/what-private-insurers-paid-hospitals-vs-what-medicare-paid-by-state.html> (accessed November 11, 2019).

³² White C, Wu VY (2014). How do hospitals cope with sustained slow growth in Medicare prices? *Health Services Research*, 49(1): 11-31.

³³ White C (2013). Contrary to cost-shift theory, lower Medicare hospital payment rates for in-patient care lead to lower private payment rates. *Health Affairs*, 32(5):935-943.

³⁴ Frakt A (2015). Hospitals are wrong about shifting costs to private insurers. *The New York Times*, March 23. Available at: <https://www.nytimes.com/2015/03/24/upshot/why-hospitals-are-wrong-about-shifting-costs-to-private-insurers.html> (accessed January 5, 2020).

³⁵ White C, Whaley C (2019). *Prices paid to hospitals by private health plans are high relative to Medicare and vary widely: Findings from an employer-led transparency initiative*. Santa Monica, CA: RAND Corporation.

pital markets are highly concentrated — with one or two major players — prices are substantially higher than where several hospitals compete against each other on quality and price.”³⁶ Thus, “hospitals that face little competition are less efficient and have higher costs,” and when there are relatively “few competing hospitals to turn to, private insurers have little choice but to cover those high costs.”³⁴ Hospitals which are generally averse to cost-shifting tend to adjust their operating expenses over the long run.^{9, 21, 32} However, there is no telling yet if monopoly exploitation is firmly entrenched in the hospital or healthcare sector or a current trend that will come to pass. The hospitals we surveyed cost-shift for a variety of reasons, including sheer persistence of conventional policy and practice, logistical convenience, strategic bias, insufficient market signals, and short-run revenue need and other temporal financial conditions.

Direct and Indirect Cost-Cutting

We find complementarity between cost-shifting and cost-cutting measures in at least two specific instances based on the experience of our surveyed hospitals.

The first one is what we refer to as *indirect* (or “backdoor”) cost-cutting. Hospitals and other healthcare organizations are likely to resort to cost-cutting to cover for operating expenses, particularly when these expenses are substantial. Moreover, these expenses are not typically built into the cost of patient care.²³ In Table 1, we made costs identical to charges to isolate overheads and transaction costs. Most of these transaction costs arise from record-keeping for claims submission and billing, along with payment collection, insurance-related costs (of negotiation, contracting, and decision-making), and legal and regulatory compliance. Transaction costs may be less obvious than patient care-related expenses. But they are often high and fast-growing. They bear directly and heavily on a hospital’s bottom-line, averaging around 25 percent of every U.S. dollar charged by both private and non-profit hospitals nationwide.^{37, 38}

³⁶ Roy A (2019). RAND study: Hospitals charging the privately insured 2.4 times what they charge Medicare patients. *Forbes*, May 11. Available at: <https://www.forbes.com/sites/theapothecary/2019/05/11/rand-study-hospitals-charging-the-privately-insured-2-4-times-what-they-charge-medicare-patients/#1c758dbb58d9> (accessed January 14, 2020).

³⁷ Himmelstein DU, Jun M, Busse R, Chevreur K, Geissler A, Jeurissen P, Thomson S, Vinet MA, Woolhandler S (2014). A comparison of hospital administrative costs in eight nations: US costs exceed all others by far. *Health Affairs*, 33(9): 1586–1594.

³⁸ Frakt A (2018). The astonishingly high administrative costs of U.S. Health Care. *The New York Times*, July 16. Available at: <https://www.nytimes.com/2018/07/16/upshot/costs-health-care-us.html> (accessed January 18, 2020).

If cost-cutting is intended for (still unbilled) overhead and transaction expenses, the additional charge can be calculated and expressed as a fraction of the CC. Assume such additional charge is equivalent to 10 percent of the CC shown in Table 2. The new charge would then be \$1,438 per patient (\$1,307 + \$131). Table 3 can be constructed

Table 3
Net profit (income) after overhead and transaction costs
(n=1,000)

Patient cohort	# Patients (%)	Costs (@\$1,000 per patient)	Charges (@\$1,438 per patient)	In-patient revenues (% of Costs)	Net profit (income)
Medicare	219 (21.9)	219,000	314,922	186,369 (85.1)	−32,631
Medicaid + CHIP	134 (13.4)	134,000	192,692	107,334 (80.1)	−26,666
Managed care (non-capitated)	230 (23)	230,000	330,740	297,666 (129.4)	67,666
Managed care (capitated)	145 (14.5)	145,000	208,510	117,740 (81.2)	−27,260
Private insurance (full pay)	116 (11.6)	116,000	166,808	166,808 (143.8)	50,808
Other third-parties	28 (2.8)	28,000	40,264	27,804 (99.3)	−196
Self-pay	106 (10.6)	106,000	152,428	152,428 (143.8)	46,428
Bad debt	12 (1.2)	12,000	17,256	0	−12,000
Charity care	10 (1)	10,000	14,380	0	−10,000
Total	1,000 (100)	1,000,000	1,438,000	1,056,149 (105.6)	56,149

similar to the two preceding tabulations. However, it should be noted that nothing precludes a hospital from indirect cost-cutting without cost-shifting at all.

In-patient revenue and net profit from social insurance programs, managed care on capitation, and other third-party payers remain constant, while uncompensated care (though negligible) incurs the same financial burden to the hospital under Table 3. The rest of the commercial insurers and self-payers will assume the added charges to obtain a positive bottom line for the hospital that is sufficient to cover for operating expenses. While any legitimate percentage for overheads and transaction costs can be substituted, we added 10 percent to the CC indicated in Table 2. This is because overhead and transaction costs for traditional Medicare and Medicaid hover around 2 percent to 5 percent, a cost-cutting goal for hospitals advanced over the years by some policy-makers and patient advocacy groups.³⁹ Some studies claim that a 25 percent operating expense per dollar of patient expense is artificially high and ridiculously driven by lack of competition and the ensuing price inefficiencies.^{34, 35, 36} Meanwhile, a few states have successfully slashed their overhead and transaction costs to 15 percent or 16 percent of hospital costs. Maryland, for one, has adopted a combination of all-payer rates and global budgeting. Under this scenario, each hospital has a single set of rates it bills to Medicare, Medicaid, commercial insurers, and other payers to contain overall cost growth to way less than 25 percent.⁴⁰

The net profit in Table 3 exceeds the original cost of patient care by 5.6 percent (\$56,149) to defray operating costs. For our model, this also means that a 10 percent increase in charges (paid by certain payers) translates into slightly more than half of that percentage in hospital net profit. Space constraints do not permit us to enumerate the alternative percentages beyond 30 percent of CC that we considered for overheads and transaction costs. Suffice it to say that any percentage increase between 31 percent and 40 percent of CC in our estimation generated a positive net profit equal to approximately 18 to 25 percent of cost of care. To illustrate, if the CC were increased to \$1,712 (31 percent of CC) or \$1,830 (40 percent of CC), the net profit to the hospital would correspond to approximately \$180,000 and \$250,000, respectively. Overhead and administrative expenses currently average around 25 percent of cost of patient care among for-profit and non-profit hospitals alike.^{37, 38} But they could be attributed to monopolistic or oligopolistic pricing strategies when market competition is weak.^{34, 35, 36}

In contrast to indirect cost-cutting for operating and related expenses, hospitals might find the need to cut cost *directly* when their charges are capped by payers who will pay

³⁹ Gee E, Spiro T (2019). Excess administrative costs burden the U.S. health care system. *Center for American Progress*. Available at: <https://cdn.americanprogress.org/content/uploads/2019/04/03105330/Admin-Costs-brief.pdf> (accessed January 15, 2020).

⁴⁰ Sabatini N, Antos JR, Haft H, Kinzer D (2017). Maryland's all-payer model—achievements, challenges, and next steps. *Health Affairs Blog*, January 31. Available at: <https://www.healthaffairs.org/doi/10.1377/hblog20170131.058550/full/> (accessed January 15, 2020).

the increased charges, or by regulation (if ever there be). In these instances, the amount to use for charges will inevitably default to the price cap, or an average cap if successfully negotiated with these payers. Assume that the \$1,307 revised charge after cost-shifting (Table 2) is not acceptable. Any new charge is pegged to a \$1,140 per patient maximum by the least able and willing of payers who will pay the extra charges.

Table 4
Net profit (income) from capped charges
(n=1,000)

Patient cohort	# Patients (%)	Costs (@\$1,000 per patient)	Charges (@\$1,140 cap per patient)	In-patient revenues (% of Costs)	Net profit (income)
Medicare	219 (21.9)	219,000	249,660	186,369 (85.1)	−32,631
Medicaid + CHIP	134 (13.4)	134,000	152,760	107,334 (80.1)	−26,666
Managed care (non-capitated)	230 (23)	230,000	262,200	235,980 (102.6)	5,980
Managed care (capitated)	145 (14.5)	145,000	165,300	117,740 (81.2)	−27,260
Private insurance (full pay)	116 (11.6)	116,000	132,240	132,240 (114)	16,240
Other third-parties	28 (2.8)	28,000	31,920	27,804 (99.3)	−196
Self-pay	106 (10.6)	106,000	120,840	120,840 (114)	14,840
Bad debt	12 (1.2)	12,000	13,680	0	−12,000
Charity care	10 (1)	10,000	11,400	0	−10,000
Total	1,000 (100)	1,000,000	1,140,000	928,307 (92.8)	−71,693

This leads us to Table 4. Based on the \$1,140 cap, PPO, POS, EPO, and similar plans (that pay charges minus a discount) will pay 103 percent of hospital costs, while the other (full pay) commercial insurers and self-paying patients will pay 114 percent on average. The *status quo* is preserved for the rest of the (third-party) payers as well as the non-payers. However, the net loss that confronts our hypothetical hospital — and that it needs to cut — is \$71,693 to at least break even.

In Table 4, in-patient revenues from the new charges yield about 93 percent of cost of care. In many real-life cases, the average yield is much less. Regardless of the yield percentage, a hospital will most likely need to perform a second-step calculation to redistribute the net loss (\$71,693) from the cap-based charge, and break even. This can be accomplished by first subtracting the loss from the collections (in Table 4) by the cost of care for all patients. The difference needs to be divided by the entire patient population (cohorts) that will be affected by the cuts. The emerging quotient represents the new cost of care per patient, post-cuts. Hence,

$$\begin{aligned}
 C_{\text{(capped)}} &= \frac{\text{Total cost of care} - \text{Net loss}}{\text{\# patients, all cohorts}} \\
 &= \frac{1,000,000 - 71,693}{1,000} \\
 &= \$928.31 \text{ (\$928 rounded)}
 \end{aligned}$$

The lower, $C_{\text{(capped)}}$ will substitute for the original cost of care (C). This produces Table 5, which contains the break-even outcome after the entire net loss (\$71,693) is trimmed off. Rounding error yielded a minimal net profit (or “paper” profit) of \$307. Under Table 5, Medicare and Medicaid and CHIP will continue to pay the same rates set by law. But with cost of care down to \$928, the proportion of their reimbursements rise to 92 percent (from 85 percent) and 86 percent (from 80 percent), respectively. The same may be said of capitation-based plans (88 percent from 81 percent) and other third-party payers (107 percent from 99 percent). New charges per patient borne by non-capitation plans (PPO, POS, EPO, etc.), full pay commercial insurers, and self-payers range from about 111 percent to 123 percent of $C_{\text{(capped)}}$. Bad debt and charity care expenses are fully absorbed under this redistribution scheme.

Table 5
Capped charges and net profit (income), break-even
(n=1,000)

Patient cohort	# Patients (%)	Costs (@\$928 per patient)	Charges (@\$1,140 cap per patient)	In-Patient revenues (% of Costs)	Net profit (income)
Medicare	219 (21.9)	203,232	249,660	186,369 (91.7)	−16,863
Medicaid + CHIP	134 (13.4)	124,352	152,760	107,334 (86.3)	−17,018
Managed care (non-capitated)	230 (23)	213,440	262,200	235,980 (110.6)	22,540
Managed care (capitated)	145 (14.5)	134,560	165,300	117,740 (87.5)	−16,820
Private insurance (full pay)	116 (11.6)	107,648	132,240	132,240 (122.8)	24,592
Other third-parties	28 (2.8)	25,984	31,920	27,804 (107)	1820
Self-pay	106 (10.6)	98368	120,840	120,840 (122.8)	22,472
Bad debt	12 (1.2)	11,136	13,680	0	−11,136
Charity care	10 (1)	9,280	11,400	0	−9,280
Total	1,000 (100)	928,000	1,140,000	928,307* (100)	307*

*Due to rounding error.

Should a hospital find that it still needs to add in overheads, administration, and related expenses (e.g., because it has not done so in its charges), a representative percentage for these expenses will have to be estimated and then multiplied by the charges per patient cohort indicated in Table 5. By proceeding with the remaining steps laid down in

Table 3 (i.e., indirect cost-cutting), a net profit shall be realized under the direct method, with sufficient allowance for overhead and administrative expenses.

Discussion and Conclusion

Even assuming market competition essentially drives price differentials in hospital charges,³⁴ further inquiry into cost-shifting is warranted by at least two reasons.

First, studies of the propensity of hospitals to cost-shift have produced mixed results, leading one scholarly review to concede that cost-shifting exists but likely not on a dollar-for-dollar ratio.⁷ Absent any legal or regulatory prohibition, cost-shifting remains a financial option available to and resorted to by hospitals even if the market drives down prices and payments. This we found in surveying nine for-profit or investor-owned hospitals in the Commonwealth of Pennsylvania. With not much tax incentives and government subsidies to compensate for reimbursement shortfalls and uncollectible charges, these hospitals may be more inclined to shift costs than government, community, and non-profit hospitals. And considering that over 80 percent of hospitals in the United States,⁹ and 65.5 percent of Pennsylvania hospitals,^{15, 16} are public or non-profit, investor-owned hospitals do not set nationwide trends, including potential spillover effects of these trends (e.g., hospital mergers to gain leverage for negotiating with third-parties and vertical integration to set up their own healthcare plans). But national trends do not put cost-shifting to rest.

Besides, hospitals and other healthcare organizations might defy economic theory or logic and respond in less rational ways for a variety of reasons: persistence of policy or practice, logistical convenience, strategic bias, insufficient market signals, and/or short-run revenue need and other temporal financial conditions. Hospital pricing and collection, for example, have become increasingly isolated from and unrelated to the underlying production costs of patient care, especially in the long-run. The long-run pattern has become one of higher, rather than lower, charges or charge-inflation upon negotiated rates, and the introduction of complexity to contract terms and their enforcement.²³ Hospitals could also act rather impulsively in opting to cost-shift. Taking a cue from behavioral economics,^{41, 42} cost-shifting will be pursued, especially in for-profit hospitals irrespective of market realities until they are effectively nudged in another direction or course of action. Hence, rather than add to the prevailing debate about its cause, mag-

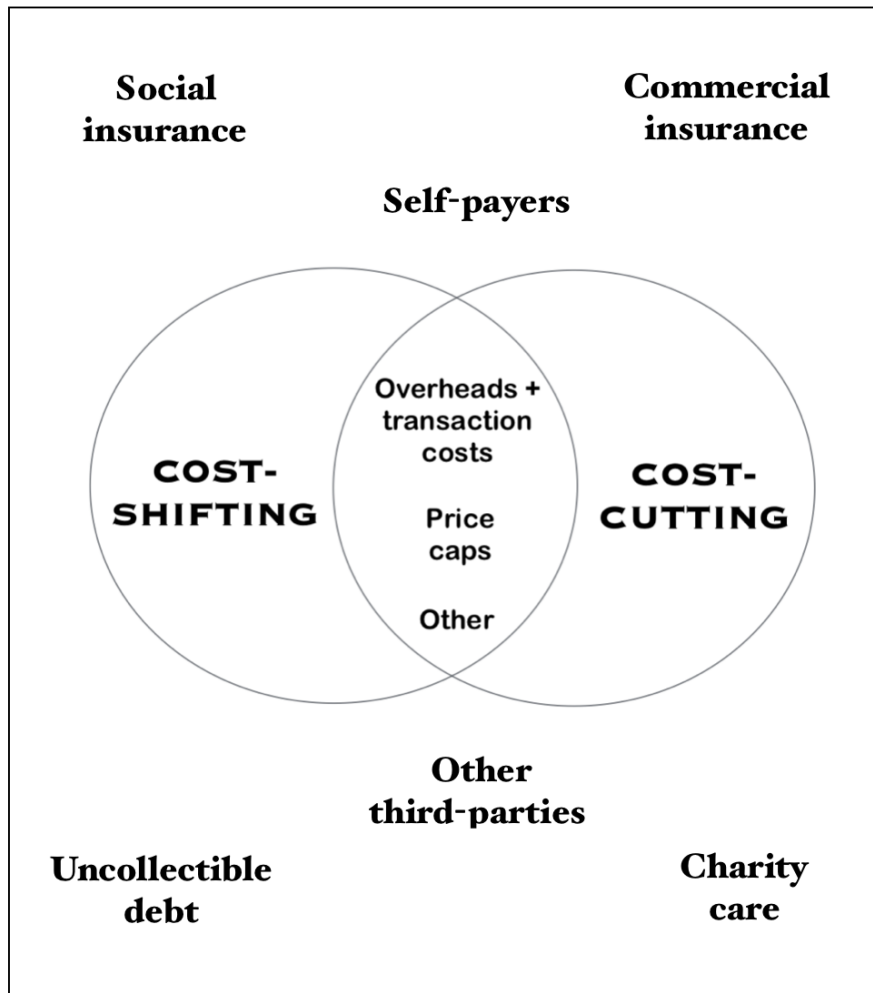
⁴¹ Thaler RH, Sunstein CR (2008). *Nudge: Improving decisions about health, wealth, and happiness*. New Haven, CT: Yale University Press.

⁴² Mendoza RL (2018). Bringing the patient back in: Behavioral decision-making and choice in medical economics. *Journal of Medical Economics*, 21(4): 313-317.

nitude, and intensity, we chose to examine cost-shifting strategy in terms of its key elements, methods, and internal dynamics.

Secondly, our survey of select Pennsylvania hospitals revealed points of intersection between cost-shifting and cost-cutting. This we illustrate in Figure 1. Cost-cutting could be a complimentary and reinforcing financing option when overhead and transaction costs of healthcare production are substantial and cannot be accommodated by cross-subsidization, price discrimination, and other measures. We relied on the conventional notion of transaction costs in economics to account for search and information costs, bargaining and decision costs, and monitoring and enforcement costs.⁴³ Without factor-

Figure 1
Intersection of cost-shifting and cost-cutting



⁴³ Dahlman CJ (1979). The Problem of Externality. *Journal of Law and Economics*, 22(1): 141–162.

ing in transaction costs, it is difficult to understand even the basic functioning of the hospital system and find a sound basis for establishing healthcare finance policy. After all, as Ronald Coase reminds us, a firm — of which an investor-owned hospital is — needs to be understood as a system of long-term contracts that emerge when short-term contracts are unsatisfactory owing to the (high) costs of collecting information, negotiating contracts and making related decisions, and enforcing them.⁴⁴

This framework is well-suited to our model, considering that from a hospital or health-care facility standpoint transaction costs are predominantly the costs of record-keeping for billing, claims, and collection, insurance-related activities, and legal and regulatory compliance. Despite the heavy and growing burden they impose on healthcare organizations, transaction costs are not typically or automatically built into the cost of (patient care) production.²³ Hospitals make up for them (sometimes exponentially) in their charges or list prices. We suggest here that cost-shifting may incorporate transaction costs by way of indirect or “backdoor” cost-cutting. It is an approach that has not been sufficiently explored in the healthcare finance literature.

Our sampling of Pennsylvania for-profit hospitals also suggests that cost-cutting may be necessary (or more likely) when net profit or income is in the red, often as a result of price caps set by third-party payers against charges (or charges with discounts) based on their ability and willingness to pay. This direct method practically reduces the cost of patient care across the board, in effect increasing the proportion paid by “underpayers” relative to cost of care. It ultimately leads to a break-even point, for which there is neither gain nor loss to the hospital or healthcare organization.

In contrast, the indirect method cuts costs by building overhead, administrative, and other operating expenses into charges or list prices, rather than cost of care which is held constant. These expenses are passed on to certain payers (i.e., non-capitation commercial insurers and self-paying patients). The yield is a net profit that equals a variable fraction of the original cost of care. It can be adjusted (most likely upwards) depending on the magnitude of overhead and transaction costs, and the ability of the hospital to negotiate with payers. This indirect method may be combined with the direct method if, for instance, there is no coverage yet for overheads and transaction costs.

There may, of course, be other points of intersection or mutual reinforcement between cost-shifting and cost-cutting. These are collectively designated as “Other” in Figure 1. For our hypothetical illustration, we identified and analyzed two key points in this study, one each for the direct and indirect methods. In any case, these intersections suggest that less cost-shifting might occur when the vast majority of social insurance shortfalls are or can be covered by hospital cost-cutting, rather than cost-shifting.

As with any method of reassigning costs, expenses, and charges, the joint use of two or more financing strategies will have attendant costs and benefits that will bear directly on

⁴⁴ Coase RH (1937). The nature of the firm. *Economica*, 4(16): 386-405.

the scope and success of their design and implementation. For instance, in choosing to cut cost of patient care under the direct method, a suitable and timely cost-calculus for determining which treatments, services, and patients will be (adversely) affected is imperative. A hospital might further restructure its cost-led pricing scheme as a rather inevitable consequence of this cost-calculus. As one study aptly points out, “cost shifting can take place only if hospitals both possess market power and have not fully exploited it. This limits both the conditions under which cost shifting is possible and its extent. Once market power is fully exploited, as it would be by a profit-maximizing firm, there is no more [or not much] room for cost shifting.”⁷(p. 122)

Prudence demands that while cost-shifting and cost-cutting might work jointly and efficiently, they ought to be considered along with other viable options or alternatives in healthcare financial management. They should also be considered in light of the reciprocal choices and actions that payers of the new charges are bound to make. As Isaac Newton’s law of motion teaches us, “for every action, there will be an equal and opposite reaction.”⁴⁵

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⁴⁵ Newton I (1687). *Philosophiae Naturalis Principia Mathematica*, 1st ed. London: The Royal Society.

Appendix A
Sample of Pennsylvania investor-owned hospitals, July 2018
(n=9)

Hospital*	Location	Staffed beds	Total discharges	Patient days	Gross patient revenues (\$000)
1	Washington	14	742	1,431	75,149
2	Coatesville	171	5,877	31,889	794,521
3	Philadelphia	148	6,824	29,795	1,249,066
4	Johnstown	436	17,208	79,228	1,341,395
5	Upland	449	16,376	83,693	3,780,429
6	Phoenixville	137	6,000	25,715	1,144,010
7	Sharon	233	6,956	31,886	693,010
8	Wyomissing	15	811	1,595	155,614
9	York	60	3,868	13,829	337,36
Total		1,663	64,662	299,061	9,233,194

*Names omitted at the request of some hospitals.