

A Floor-and-Trade Proposal to Improve the Delivery of Charity-Care Services by U.S. Nonprofit Hospitals

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NOTE: This discussion paper is a proposal from the authors. As emphasized in The Hamilton Project's original strategy paper, the Project was designed in part to provide a forum for leading thinkers across the nation to put forward innovative and potentially important economic policy ideas that share the Project's broad goals of promoting economic growth, broad-based participation in growth, and economic security. The authors are invited to express their own ideas in discussion papers, whether or not the Project's staff or advisory council agrees with the specific proposals. This discussion paper is offered in that spirit.

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Abstract

Many uninsured Americans rely on charity care provided by nonprofit hospitals, which receive substantial tax benefits in exchange for providing community benefits. In this discussion paper we show that the hospitals that receive the largest tax benefits tend to be located in wealthier communities, whereas the demand for uncompensated care is highest in poorer communities. To ameliorate this geographic mismatch between the supply of charity care and the demand for charity care, we propose a floor-and-trade system whereby nonprofit hospitals would be required to meet charity-care standards, either by providing care to local patients or by purchasing credits from other hospitals. We explain how state governments can best implement our proposal while tailoring the plan to their specific needs.

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Chapter 1. Introduction

Among industrialized nations the United States is unique in the large number of individuals who lack health insurance coverage. Even after the full implementation of the Patient Protection and Affordable Care Act (ACA), the Congressional Budget Office (CBO) estimates that approximately 30 million Americans will be uninsured (CBO 2015). These individuals will not go without access to expensive medical treatments, because a large fraction of the nation's private, largely nonprofit hospitals provide a social safety net of health care for the indigent. In exchange for providing this care and a variety of other community benefits, these nonprofit hospitals are exempt from nearly all taxes.¹ This exemption cost federal, state, and local governments an estimated \$25 billion in 2011 in terms of forgone taxes, subsidies for charitable contributions, and the value of tax-exempt bond financing (Rosenbaum et al. 2015). Despite the size of this tax expenditure, there is very little direction or monitoring of how nonprofit hospitals meet their implicit obligations under this system. Partly as a result, there are some glaring holes in the informal health safety net that expose many low-income individuals to potentially crushing medical debt.²

The holes in the safety net arise in part from a geographic mismatch between the supply and demand for these free medical services. Under the current system, hospitals cannot easily assist in the provision of care outside of facilities that they own. If the demand for charity-care services was uniformly distributed geographically, then this constraint would not be an issue. However, the unequal distribution of income across communities in the United States means that hospitals face differential demand for charity services, with hospitals in the poorest communities facing the largest demand from the poorest patients. At the same time, hospitals in the wealthiest communities have more financial resources and greater implicit community service obligations due to their higher forgone taxes. As a result, hospitals in poorer communities set lower income thresholds for charity-care eligibility, so that patients who would qualify for charity care at a hospital in a wealthier community are ineligible for charity care at the hospital in the poorer community, and must instead face potentially substantial medical bills.

The recent implementation of the ACA will likely exacerbate this geographic mismatch, particularly in those states that

have not implemented the Medicaid expansion. ACA subsidies are not available to those below the federal poverty level (FPL), meaning that in states that did not expand Medicaid, the poorest of the uninsured will be the least likely to benefit. Furthermore, these individuals are uniformly exempt from the ACA's insurance mandate. By contrast, individuals just above the FPL receive generous subsidies under the ACA, face penalties for not purchasing insurance under the individual mandate, and are therefore much more likely to purchase insurance. As a result of these factors, hospitals serving the poorest areas in nonexpansion states are likely to see little decline in their demand for charity care, while hospitals in less poor areas will see potentially large declines in their demand for charity care.

Even if previously uninsured individuals now obtain coverage through an exchange, it is likely that many will select plans with large deductibles and high coinsurance rates that exceed their available resources. So despite having insurance, many individuals who require extensive medical treatment may be unable to pay their share of costs. For example, a recent Kaiser Family Foundation poll found that 15 percent of enrollees in nongroup high-deductible plans would be unable to pay a \$1,500 medical bill (The Henry J. Kaiser Family Foundation 2015). While these unpaid cost-sharing payments are not traditionally considered charity care, they will likely make up a growing fraction of the hospital uncompensated care and a meaningful cost to the newly insured.

These factors suggest that there could be great societal gains from creating a more formal system regulating how hospitals meet their community-benefit obligations with respect to charity care. Given that the ACA will lead to an overall decline in the demand for uncompensated care services—care that is one component of the community benefit a hospital provides—even as the tax expenditure associated with the nonprofit tax exemption remains relatively unchanged, now is a particularly appropriate time to reconsider the system governing the tax-exempt status of nonprofit hospitals. Indeed, many state governments are already considering policies aimed at directing the activities of nonprofits. For example, Illinois recently (2012) passed legislation that requires hospitals to provide community benefits in excess of the value of their tax exemption, and attempted to strip the tax-exempt status of

several hospitals in the state. Other states have passed, or are considering passing, legislation requiring hospitals to devote a certain percentage of expenses to charity care. However, we note that because of the geographic mismatch in the supply of and demand for charity care that setting a blunt floor for—or minimum level of—charity-care services could exacerbate the existing inefficiencies in the system. Any uniform mandate requiring that hospitals devote a certain percent of expenses to charity care will disproportionately benefit patients in higher-income areas. Relatedly, any uniform mandate requiring that hospitals devote enough resources to charity care to fully meet local demand for charity care will place an undue financial strain on hospitals in the poorest of areas. It is perhaps for this reason that attempts at mandating crude floors for the provision of charity care have been considered and defeated in the past at the state and federal levels.

In this paper we propose to repair the health-care safety net by setting a minimum level, or floor, of charity-care services that each nonprofit hospital must meet and a series of tradable charity-care credits created by offering services to low-income patients without expectation of compensation. The addition of a system of tradable credits to a floor overcomes the inefficiencies that existed in previous floor-only proposals that have been considered and defeated in the past. Our baseline proposal, a floor-and-trade exchange system for charity-care credits, has three salient features:

1. States set a floor for the percentage of a hospital's expenses that is dedicated to charity-care expenses, i.e., the floor.
2. States set the income threshold, which is a family income limit above which uncompensated care cannot be counted toward a hospital's required charity-care provision.

3. Any given hospital may subsidize the charity care provided by another hospital that is compliant with the income threshold, and in so doing receive credit toward its floor that is valued at the cost of providing that care at the treating hospital.

At the most basic level, the economic foundations of this proposal are most similar to those that support the successful regulation of sulfur dioxide emissions as part of the Clean Air Act Amendments of 1990. These amendments created a market where firms could trade credits representing the right to emit sulfur dioxide into the atmosphere. Because firms are allowed to trade these credits, those firms with the lowest cost of limiting pollution from their power plants will undertake those efforts. In contrast to a blunt quantity regulation on the pollution that can be emitted by each factory, this more-flexible system of transferring credits can achieve the same reduction in pollution at a lower overall cost.

Similarly, our system would allow for any chosen level of charity care with a higher overall benefit for society by ensuring that the care is provided to individuals with the lowest incomes. Although there are a variety of ways that this proposal could be structured to meet different distributional and efficiency goals, at the simplest level the proposal improves social welfare by redirecting the provision of charity care toward those individuals who can least afford to purchase medical care and are instead incurring large debts to obtain it.

Chapter 2. Background and Challenges

In the United States many different social insurance programs provide health coverage to low-income and disabled individuals. The Medicaid program—the public insurance program for those with low income and resources—has expanded from covering a limited number of individuals to covering nearly all otherwise uninsured pregnant women and children in families with incomes up to and exceeding 200 percent of the FPL. In states that have implemented the ACA Medicaid expansion, the program covers all individuals with family incomes up to 138 percent of the FPL. Medicaid operates as a federal–state partnership where states are given discretion to offer insurance benefits above a federally mandated floor. This discretion leads to a variety of income thresholds for social insurance across the country. For example, in California, children in families earning up to 260 percent of the FPL qualify for Medicaid, whereas in Texas the threshold for coverage is 200 percent of the FPL. As of January 2015, 23 states have not implemented the ACA Medicaid expansion; many individuals earning less than 100 percent of the FPL are left out of the ACA insurance exchanges and Medicaid in these states.

The variability in eligibility for social insurance, combined with high and rising costs of private health insurance, leaves many low-income individuals without coverage. The uninsured do not completely forgo access to medical care, particularly for emergencies. Supporting the public social insurance system is a safety net of private providers that deliver health care to many individuals regardless of their ability to pay (Garthwaite, Gross, and Notowidigdo 2015). While there are many regulatory features that have led to this arrangement, a primary driving force has been the large number of nonprofit hospitals.³ Many nonprofit hospitals are mission driven—that is, they are organized with the express purpose of creating a societal benefit. With this mission in mind, nonprofit hospitals are exempt from all federal taxes. State and local governments have the right to determine the tax-exempt status of hospitals, but, in a vast majority of cases, nonprofit hospitals are also exempt from state and local taxes.⁴ In 2011 the cost of this tax expenditure was nearly \$25 billion (Rosenbaum et al. 2015). In exchange, nonprofit hospitals are expected or required to provide community benefits.

Two forces contribute to gaps in the hospital safety net, as discussed below in greater detail. First, the community-

benefit standard set forth in IRS regulatory guidance (2015b) leaves hospitals with considerable flexibility in meeting this standard and, as a result, may lead to the underprovision of charity care. We believe that part of the failure of the safety net is attributable to the relatively decentralized and unmonitored means by which hospitals meet their community-benefit obligations. Unlike the official social insurance system, which offers a predefined set of services to its beneficiaries, the components of the nonprofit hospital benefits are largely determined by each individual hospital. Hospitals are free to make these determinations without regard for what maximizes the benefits of the community.⁵ For example, hospitals may give undue preference to research and teaching even though other activities may provide greater community benefits.

Second, hospitals generally do not treat uncompensated care patients outside of their catchment area so, as we describe more carefully below, there is a geographic mismatch between where hospitals are located and where there are the greatest numbers of charity-care patients. As a result, the obligation to meet their community benefit leaves some hospitals that are, on average, located in higher-income areas treating more higher-income patients with uncompensated care than they would otherwise, or meeting their community-benefit obligations through other means, such as research and teaching. Moreover, hospitals in higher-income areas receive larger tax benefits, calling into question whether public resources are being used most efficiently to treat the neediest cases.

NONPROFIT HOSPITALS AND THE COMMUNITY-BENEFIT STANDARD

In considering whether nonprofit hospitals are meeting a community-benefit standard, there are two broad questions: (1) What activities should count toward a community benefit? and (2) How do we place a dollar value on these activities? Considering the first question, historically the hospital community benefit was synonymous with charity care—in other words, the benefit was medical services provided without compensation. Following a 1969 IRS ruling, the definition of a community benefit for the purposes of federal tax exemption was greatly expanded (GAO 2008).⁶ As a result of this ruling and subsequent regulations, the Government Accountability Office (GAO 2008) describes the contemporary federal community-benefit standard:

(Nonprofit) hospitals are able to qualify for federal tax exemption under section 501(c)(3) of the Internal Revenue Code since IRS and courts have recognized the promotion of health for the benefit of the community—where medical assistance is afforded to the poor or where medical research is promoted—as a charitable purpose. Specifically, nonprofit hospitals must be organized and operated exclusively for the promotion of health, ensuring that no part of their net earnings inure to the benefit of any private individual, and may not participate in political campaigns on behalf of any candidate or conduct substantial lobbying activities.

Nonprofit hospitals do not appear to face serious challenges in meeting these objectives that, notably, do not include any prespecified level of overall community benefit or any of its components (such as charity care, teaching, or research). While the IRS does not mandate specific levels of community benefit, it requires hospitals to report on community benefits, and has created definitions for the activities that count as community benefits for the purposes of reporting. In defining community benefits, the IRS includes care that the hospital voluntarily provides at a loss (i.e., charity care, shortfalls from means-tested government programs, and subsidized health services). The IRS (2015b) also includes a menu of other activities, including community health improvement and community-benefit operations, health professions education, research, and cash and in-kind contributions for community benefit.⁷ However, not all revenue-losing activities of hospitals are considered to be community-benefit activities. For example, losses on patients that do not pay for their medical services after a hospital attempts to collect (also known as bad debt) cannot be included in a community-benefit calculation. In addition, losses from treating Medicare patients and community-building activities that are not linked to health improvements are also not part of the IRS community-benefit standard (Rosenbaum et al. 2015). For example, social services such as subsidized child care, job training, or subsidized housing may not tie to a hospital's mission to improve health and therefore may not count as community benefit.

In spite of IRS rules giving nonprofit hospitals great leeway in how they satisfy their federal community-benefits obligations, those hospitals provide a substantial amount of charity care. According to IRS data, in 2011 nonprofit hospitals (system and nonsystem, combined) provided \$57 billion (or 9 percent of operating costs) in uncompensated care, which is a combination of charity care and services for which the hospital unsuccessfully attempted to collect payment. We estimate that only 62 percent of this amount was actual charity care—in other words, medical services provided with no expectation of payment from patients or third parties.

While there are many reasons why nonprofit hospitals provide charity care, those hospitals may be under little explicit

external pressure to do so. Thus, a system that alters incentives, such as the system we propose, could have a substantial impact on the provision of charity care. However, our proposal is not the first recent movement toward increased accountability for the activities of nonprofit hospitals. For example, recent federal regulatory changes by the IRS and sections of the ACA created a variety of new charity-care reporting requirements for hospitals including but not limited to identifying an income eligibility level for charity care and the percentage of bad debt that is generated by charity-care-eligible patients (2015c). One reason for the increase in federal attention is the reduced demand for uncompensated care services expected to result from the ACA insurance expansions.

States and municipalities vary to the degree that they closely scrutinize community benefits, but overall scrutiny has increased over time. Currently, 31 states require hospitals to provide some type of reporting of the community benefits that they provide, separate from the IRS Form 990 reporting requirement. In addition, 25 states have specific community-benefits standards that range from the relatively broad Maryland standard that includes all activities that the IRS regards as community benefits as well as other community-building activities, to the narrower Florida standard that recognizes only charity care and losses on care to Medicaid patients (Somerville, Nelson, and Mueller 2013). Only five out of the 25 states have specific threshold targets for the level of community benefit, such as a share of operating costs that a hospital must spend on community benefits (Hilltop Institute 2015). In other states, provision of a community benefit is a factor when the state considers approving a hospital's certificate-of-need application. Even in states without a formal community-benefits standard, the implicit threat of tighter oversight may create incentives for nonprofit hospitals (and potentially for for-profit hospitals, too) to provide and report on community benefit.

A second important issue is the question of how to value community-benefit activities. The IRS provides a uniform standard that attempts to capture the economic losses incurred in activities that benefit the community. For example, hospitals must follow standard accounting rules to estimate the losses incurred on charity patients. While hospitals have some leeway in how they interpret and implement these rules, the reported losses are likely to approximate the actual economic losses. One potentially undesirable implication of this methodology is that efficient hospitals must treat more patients relative to inefficient hospitals, *ceteris paribus*, in order to generate the same measured community benefit.

Measuring economic losses from other community-benefit activities creates far more difficulties, and the IRS perhaps deliberately avoids tackling some of them. For example, while it is rather straightforward for a hospital to compute accounting losses incurred on research (i.e., it subtracts grants from research expenses), it is more difficult to estimate the value of any brand enhancement afforded by research. If hospitals

exploit this increased brand value through higher prices in the privately insured market, then the accounting losses from research will exceed the true economic losses. Indeed, hospitals might actually enjoy an economic profit despite the accounting loss; in these cases, hospitals would undertake this activity even in the absence of a nonprofit community-benefit requirement. This is also true for teaching and certain community health improvement activities, but seems less likely to be true for charity care. The result is that hospitals may be tempted to meet their community-benefit threshold by selecting those community-benefit activities that minimize economic losses rather than those that maximize societal value. An important implication is that when we consider the variety of community-benefit activities and the ways in which hospitals can capture value from them, the distribution of activities chosen by nonprofit hospitals is likely different from the distribution that would maximize social value. Importantly, relative to the social optimum, nonprofits may underprovide charity care relative to other community-benefit activities that are more likely to have a private value for the hospital, such as research and teaching. It is important to note that this can happen even when the average value to society of the research and teaching provided by hospitals is large.

In short, there is considerable variation in the extent to which and ways in which hospitals meet their implicit community-

benefit obligations. Moreover, hospitals have considerable flexibility in how they meet any given threshold, and likely underprovide charity care, contributing to holes in the hospital safety net. Unlike teaching, research, and other forms of community outreach, few hospitals likely receive an economic benefit from providing large amounts of charity care. These considerations inform our floor-and-trade proposal.

THE GEOGRAPHIC MISMATCH IN CHARITY-CARE DEMAND AND NONPROFIT TAX BENEFITS

The problem described above is compounded when we account for the fact that hospital services tend to be local. This is especially true for emergency medical services, which hospitals are required to deliver under the Emergency Medical Treatment and Active Labor Act of 1986 (EMTALA). As a result, an individual hospital's role in the social safety net is largely limited by its geographic catchment area. A hospital may be willing to supply a large amount of charity care to low-income individuals, but if that hospital is in a high-income area it may face little demand for charity care from such patients. This lack of demand could explain the pattern in figure 1, which shows that hospitals in the lowest-income markets provide more charity care than those in higher-income markets.⁸

In figure 1 we separate community-benefit activities into two broad categories: (1) uncompensated care (i.e., charity care,

FIGURE 1.
IRS Community Benefit and Area Income

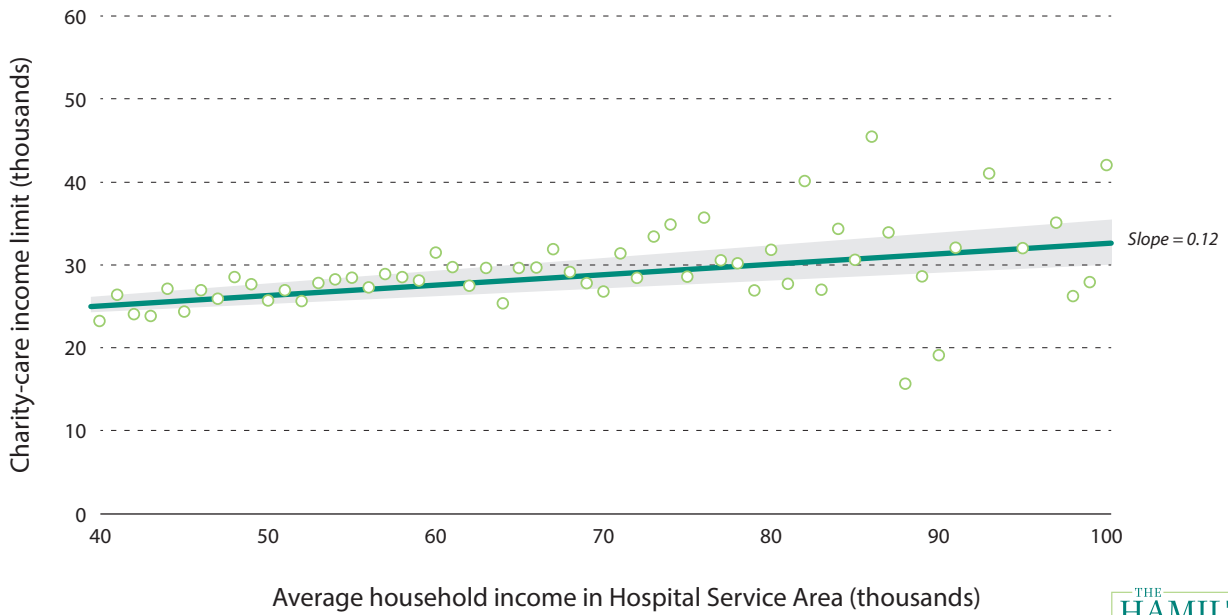


Source: 2011 IRS 990 Schedule H form for non-system, nonprofit hospitals.

Note: Charity care does not include bad debt. Analysis is based on the 2011 IRS 990 Schedule H, Part I, Question 7, "Financial Assistance and Certain Other Community Benefits at Cost." Sample is 2,031 nonsystem hospitals filing IRS 990s.

FIGURE 2.

Charity-Care Income Limit and Area Income



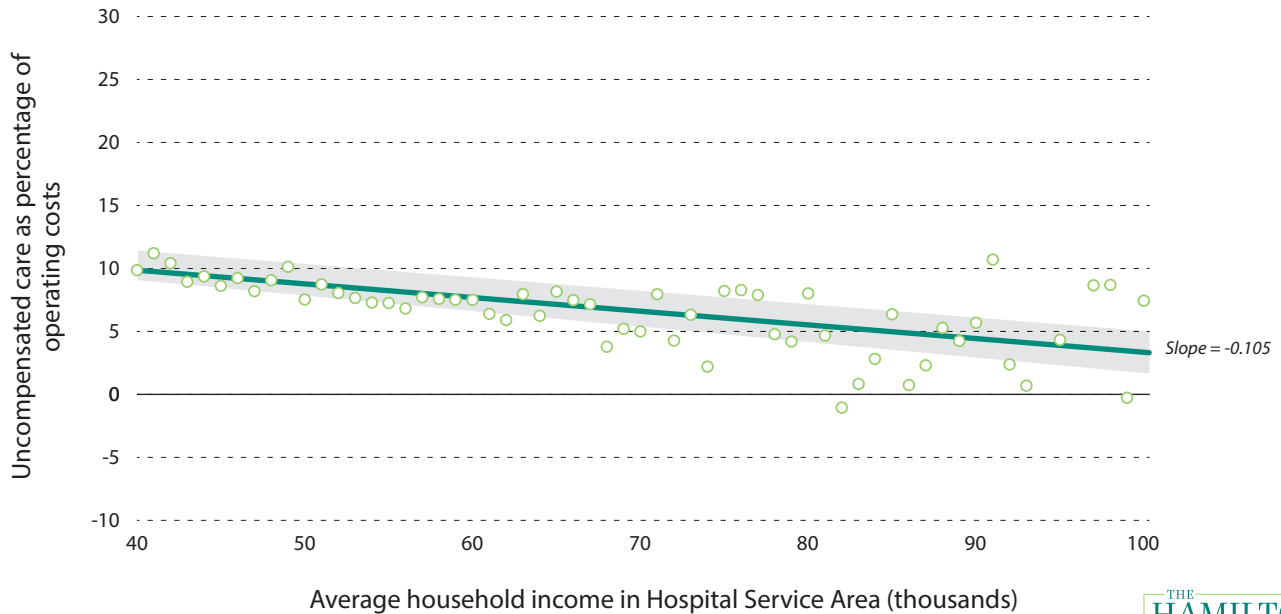
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Source: 2011 IRS 990 Schedule H form for non-system, nonprofit hospitals.

Note: Analysis is based on the 2011 IRS 990 Form Schedule H, Part V, Question 9, "Used federal poverty guidelines (FPG) to determine eligibility for providing free care?" The sample is 1,810 nonsystem hospitals basing charity-care eligibility on the FPL, which is \$15,130. To construct this table, the dependent and independent variables were truncated at the 5th and 95th percentiles. Next, state-level variation in the dependent variable was partialled out. The resulting data serve as the basis for the figure. The figure plots a regression line and the 95 percent confidence interval. The blue data points were constructed by creating bins for each unit (\$1,000) increment of income (e.g., incomes that fall between \$49,500 and \$50,500 are grouped into the bin for income of \$50,000). The data points show the mean charity-care limit for each bin.

FIGURE 3.

Total Uncompensated Costs by Area Income, 2011



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Source: 2011 IRS 990 Schedule H form for non-system, nonprofit hospitals.

Note: Analysis is based on the 2011 IRS 990, Schedule H, Part I, Question 7, "Financial Assistance and Certain Other Community Benefits at Cost," and Part III, "Bad Debt, Medicare, & Collection Practices." Sample is 2,031 nonsystem hospitals filing IRS 990s. Variables are truncated at the 5th and 95th percentile. State-level variation in the dependent variables has been partialled out. The resulting data serve as the basis for the figure. The figure plots a regression line and the 95 percent confidence interval. The purple data points were constructed by creating bins for each unit (thousands) increment of income (e.g., incomes that fall between \$49,500 and \$50,500 are grouped into the bin for income of \$50,000). The data points show the mean uncompensated care costs as a percentage of operating costs for each bin.

TABLE 1.

Charity-Care Eligibility and Local Income

Local Income	Charity-Care FPL Threshold	Unmet Charity-Care Demand	Share Charity-Care-Eligible
All	181	0.22	0.29
<42	161	0.33	0.31
42–47	164	0.22	0.29
47–52	181	0.23	0.29
52–61	190	0.21	0.28
>=61	210	0.18	0.29

Source: 2011 IRS 990 Schedule H form for non-system, nonprofit hospitals.

Note: "Charity-Care FPL Threshold" is the mean income threshold at which a patient is eligible for free care. It is determined based on a sample of 1,810 nonsystem hospitals that report an FPL cutoff for determining charity-care eligibility. "Unmet Charity-Care Demand" is the share of charity-care-eligible uncompensated care expenses classified as bad debt; it is calculated for the 2,031 nonsystem hospitals in our sample. "Share Charity-Care-Eligible" is the share of households that are eligible for free care based on a hospital's threshold and are likely to receive it, depending on whether hospitals actually provide free care to those who are eligible. It is based on local area income and free care FPL thresholds, and is further adjusted to account for the presence of charity-care-eligible bad debt.

subsidized health services, and shortfalls from means-tested government programs), and (2) other community-benefit activities (i.e., cash and in-kind contributions for community benefit, research, community health improvement and community benefit operations, and health professions education). While overall community-benefit activities vary only minimally with local area income, the composition meaningfully differs across markets. In particular, hospitals in the lowest quintile have 40 percent higher charity-care costs (relative to total hospital costs) than hospitals in the highest-income quintile. Hospitals in these low-income markets also spend less on other community-benefit activities; in particular, they spend only 0.1 percent of their costs on research compared to 1.53 percent for hospitals in the highest-income quintile.⁹ These differences are economically meaningful. If hospitals in the lowest quintile provided the same level of charity care as those in the highest quintile, they would enjoy a one percentage point higher operating margin, which amounts to approximately 20 percent of the average hospital's net operating margin.

Perhaps as a result of the differential spending, those receiving charity care in higher-income markets tend to be wealthier than those receiving charity care at hospitals in poorer areas. As suggestive evidence of this fact, figure 2 shows how the hospital-based charity-care eligibility thresholds vary by the hospital market's average income.¹⁰ The regression line is positive, implying that hospitals in wealthier communities have higher-income thresholds, with a slope of 0.12. To interpret this slope, suppose that a hospital in a community with an average income of 100 percent of the FPL sets an eligibility threshold for a family of four of \$23,850 (100 percent of the FPL): then a similar hospital in community with an average income 400 percent of the FPL would set its threshold at \$32,436 (136 percent of FPL). Patients with incomes

between \$23,850 and \$32,436 will face far different financial consequences, depending on which hospital treats them.

In table 1 we group hospitals by market income quintiles. This grouping provides a useful summary of the result of the combination of lower total charity-care provision and higher-income thresholds in wealthier communities. The first row contains national figures, showing that the average threshold for charity-care eligibility is 181 percent of the FPL. This does not imply that all of these individuals will receive charity care. According to IRS data, 22 percent of uncompensated care given to charity-care-eligible patients was in the form of bad debt; in other words, hospitals billed these patients for services and wrote off the bills as bad debt after the patients were unable to pay in full. This is distinct from charity care, which is provided with no expectation of payment. However, this effect was not constant across geographic areas. Rows (2) to (5) contain the same calculations by income quintile of the local hospital market. Broadly speaking, as income increases, hospitals establish a higher-income threshold for charity care and provide less uncompensated care as a percentage of expenses; at the same time, a smaller percentage of their bad debt cases involved patients who were eligible for charity care but were instead billed for their services.¹¹

To more clearly illustrate this pattern, consider the Bridgeport, Connecticut, hospital referral region in the southwest corner of that state. Greenwich Hospital sets an income limit for charity care of 250 percent of the FPL; only 30 percent of its bad debt cases were eligible for charity care. Contrast this with Norwalk Hospital, which is located in a poorer community a mere 15 miles away. This hospital sets a less generous limit of 200 percent of the FPL and yet nearly 45 percent of its bad debt cases were eligible for charity care. This geographic mismatch results in Greenwich Hospital providing charity care to some

TABLE 2.

Effect of 1 Standard Deviation Increase in Area Income on Benefit of Being Nonprofit, as a Percent of Hospital Operating Costs

Source	Amount
Local property tax	0.06
Nonprofit bonds	0.07
Corporate taxes	0.21
Charitable Donations	0.05
Total	0.39

Source: 2011 IRS 990 Schedule H form for non-system, nonprofit hospitals.

Note: The standard deviation of local area income is 14.5.

relatively high-income Connecticut residents, while lower-income Connecticut residents near Norwalk Hospital are exposed to potentially crushing medical debt.

We investigate this question further in figure 3, which examines how uncompensated care varies with market income. Figure 3 shows that total uncompensated care expenses are higher in lower-income markets. To provide some sense of the magnitude, a one standard deviation decrease in a hospital's market income is associated with a 1.53 percentage point increase in a hospital's uncompensated care burden. This is approximately 27 percent of an average hospital's net operating margin. Exploring this relationship further, we found that several major components of uncompensated care, including charity care, also decline with market income, although the magnitude of the decline varies by component.¹²

Overall, these results suggest that hospitals in lower-income markets face a higher demand for charity care and that they are able to accommodate only a share of this demand. As a result, hospitals in lower-income markets must deny charity care to relatively low-income patients, even as hospitals in higher-income markets are offering charity care to relatively higher-income patients. Given a lack of community need for

charity care in their markets, hospitals in higher-income areas may find alternative ways of meeting their community-benefit obligations. Overall, hospitals in lower-income markets provide more charity care and more uncompensated care that does not count as community benefit. Thus, we conclude that the costs of following EMTALA and being a nonprofit facility are higher for hospitals in lower-income markets relative to hospitals in higher-income markets.

While the demand for uncompensated care is greater at hospitals in low-income markets, the tax-related benefits from organizing as a nonprofit are greater in high-income markets. We estimate the benefits of being a nonprofit arising from exemptions from local property taxes and corporate income taxes, the ability to issue tax-exempt bonds, and the fact that contributions to these hospitals are deductible from the donors' taxes. Table 2 presents estimates of the effect of a one standard deviation (approximately \$14,500) change of market income on the tax benefits of being a nonprofit hospital. We find that hospitals in markets that have incomes one standard deviation above average receive additional tax breaks equal to 0.39 percent of their operating costs relative to hospitals in average income markets. The greatest benefit comes from the corporate income tax exemption and the smallest benefit comes from the tax deductibility of donations to the hospital.

The geographic mismatch in benefits demonstrates two fundamental issues about the existing system governing nonprofit hospitals and our proposal. First, the current system embodies a fundamental unfairness under which the benefits of being a nonprofit hospital disproportionately accrue to one set of hospitals, while the costs disproportionately accrue to another set of hospitals. Second, this geographic mismatch further highlights the important interaction between the floor and trade components of our proposal. Specifically, a floor-only proposal, like the one in Illinois, in which hospitals are required to provide community benefit in excess of the value of their tax exemption is likely to increase the provision of community benefit in higher-income markets, without addressing the problem of underprovision in lower-income markets.

Chapter 3. The Proposal: The Basic Structure of a Floor-and-Trade System

In our baseline proposal, our floor-and-trade exchange system for charity credits has three salient features:

1. States will specify the minimum percentage of a hospital's expenses that must be dedicated to charity-care expenses, which we refer to as "the floor."
2. States will set a family income limit above which uncompensated care cannot be counted toward a hospital's required charity-care provision, which we refer to as "the income threshold."
3. Through a system of credits, hospitals providing charity care above the floor may trade with other hospitals providing less than prescribed by the floor. In effect, Hospital A, providing levels of charity care below the floor, may subsidize the charity care provided by Hospital B with charity-care levels above the floor. In turn, Hospital A will receive credit toward its floor that is valued at the cost of providing that care at Hospital B.

STATES WILL DESIGN, IMPLEMENT, AND OVERSEE THE FLOOR-AND-TRADE SYSTEM

Given that so much of the current social safety net for health insurance is determined at the state level and that state and local property tax exemptions make up the bulk of the tax savings for nonprofit hospitals, the state appears to be the most appropriate governing body. In many states, this system would require enabling legislation, although some states have existing boards that could implement all or part of this system. The exact specifics of implementation do not detract from the main point that allowing state policymakers to better tailor the relevant policy variables to local conditions will improve the efficiency gains from our proposal. It is also possible that states may choose to band together to offer a multistate marketplace for tradeable credits.¹³ This coordination may be particularly attractive in markets where hospitals treat many patients across state lines, and where therefore the expenditures of nonprofit hospitals assist patients in multiple jurisdictions.

Another advantage of state rather than federal implementation is that it allows for locally tailored responses to a broad and potentially differing set of community needs. Some states may prefer large amounts of research and teaching, others may value

hospital investments in community health, and finally others may believe that charity care is the most important component of the nonprofit exemption. Thus, in establishing the level for the floor under feature (1), states would determine the importance of contributions of each community-benefit activity provided by hospitals across the state and then carve out a portion of the community benefit for charity care. Under our baseline proposal, if aggregate expenditures on community-benefit activities remained the same, our proposal would leave the majority of this spending for noncharity-care activities.

Similarly, given the unequal distribution of income across the United States, having states or even groups of contiguous states determining the income threshold for charity care will allow for a more careful mapping of the demand for charity-care services. Today, there is a large amount of interstate variation in charity care provided, reflecting not only differences in average income, but also local variation in the value placed on charity care, a feature that our proposal would continue to respect.

After a state creates its respective floor and income thresholds, our proposal works in the following manner:

1. Hospitals that find themselves below the charity-care floor will transfer resources to hospitals that find themselves above the floor. These transfers take the form of charity-care credits sold on an exchange or directly transferred between hospitals. Hospitals below the floor will be net purchasers on the exchange, while hospitals above the floor will be net sellers.
2. In addition, hospitals that are providing care to patients above the state income threshold will no longer be able to count this care toward their charity-care floor obligations. Therefore, they would either need to expand the provision of charity care to lower-income patients or, if they exhaust the population in their local market with incomes that qualify for care, they would need to purchase additional charity-care credits from hospitals with patients at or below the income threshold.
3. Attracted by the demand for these charity-care credits, hospitals with large, low-income patient populations will likely increase their provision of charity care to these individuals in order to be able to sell credits on the

exchange. They can accomplish this by choosing to forgo billing patients below the income threshold and instead treating them as charity care. This change in the treatment of patients below the income threshold will be attractive to these hospitals because they can receive charity-care credit with certainty rather than face the low expected value of billing low-income patients who have weak ability to pay their bills.

This trade system increases social welfare because decreases in charity care to higher-income individuals would be offset by increases in charity care to lower-income individuals.¹⁴

The ultimate price that is paid for the credits will be determined by the relative supply and demand of charity-care services. Demand, which will likely come from hospitals in high-income areas, will roughly depend on the charity-care floor

BOX 1.

How Proposal Redirects Charity Care and Increases Social Welfare

Suppose Montgomery Burns Memorial Hospital (Burns Memorial) is located in a wealthy suburb. It currently provides \$1 million in charity care to patients whose incomes are below the income threshold and \$0.5 million in charity care to patients whose incomes are above it. Burns Memorial faces a charity-care floor of \$2.5 million. It also has \$2 million in bad debt, but it is all to patients whose income is above the income threshold.

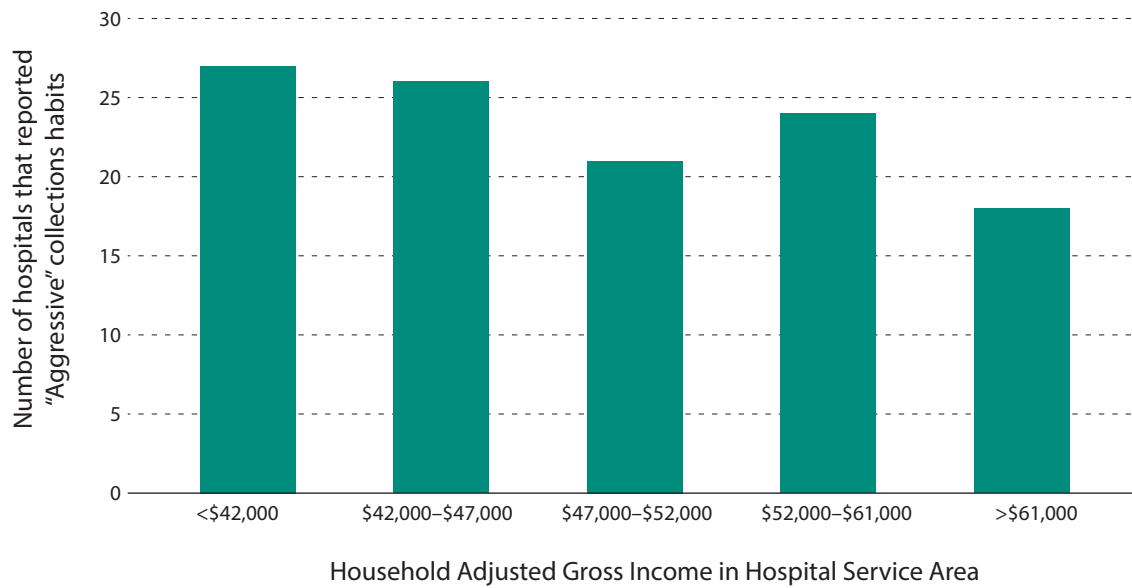
Hospital for the Poor (HFP) Hospital is located in a low-income area. It provides \$2.5 million in charity care, well above its minimum charity-care floor of \$1.5 million. All of the charity care at HFP is provided to patients who are below the income threshold. The hospital also spends \$0.5 million on uncompensated care to patients who, while impoverished and minimally able to pay, have higher incomes than the patients to which it provides charity care.

Before the implementation of a floor-and-trade system, these patients are billed for their medical services. Of the \$0.5 million in costs, HFP is able to earn \$0.1 million by selling these debts to a third-party debt collector. HFP therefore has \$0.4 million in bad debt to patients whose incomes are below the income threshold. After our proposal goes into effect, Burns Memorial will need to purchase \$1.5 million in income threshold-compliant charity-care credits to satisfy its obligations. HFP can sell credits to Burns Memorial for the \$1 million in “excess” charity care it is currently providing. Burns Memorial can also obtain an additional \$0.5 million in credits by paying for the care delivered to the HFP patients whose incomes are below the threshold yet are receiving bills from HFP. HFP has an incentive to agree not to bill these patients and instead provide them charity care because it would otherwise expect to receive only \$0.1 million had it pursued payment from these patients. The net result is that HFP is better off financially, and the balance of charity-care patients in the system is significantly tilted toward lower-income patients, many of whom would have otherwise faced large medical bills. Burns Memorial finances this change, but only as part of its obligation to meet its nonprofit community-benefit threshold.

The ultimate price paid for the charity-care credits will be a function of many factors, including the negotiating prowess of the two hospitals. Importantly, as long as some hospital has unmet (or all hospitals have exactly met) charity-care demand, the price will be no more than the cost of care.¹⁵ Similarly, the price will not be below the amount that the supplying hospital could have received if they attempted to collect on the bills for these services. Thus, the price the Burns Memorial must pay HFP may be determined by the plight of a third hospital. For example, suppose, Hospital for the Barely Poor (HFBP) also incurs \$0.5 million in costs to uninsured patients, who are slightly higher income than those of HFP but still below the income threshold. As a result of the patients’ relatively greater income, HFBP can sell the debts of these patients to a debt collector for \$0.2 million. Each hospital would be willing to provide additional charity care and sell its resulting credits to Burns Memorial if it is paid at least the amount it would have received if it had billed the patients, failed to collect payment, and sold the debt to a debt collector. As a result, Burns Memorial will accept only an offer to buy charity credits from HFP with a price that is less than \$0.2 million because for that price it could purchase the credits from HFBP. As in a cap-and-trade scheme, the price will not be determined administratively but instead left to market forces. With a sufficient number of participants, the price of charity care will equal the expected amount that the marginal hospital debt seller could obtain if it sold its debt on the market for bad debt rather than provided the care as charity and sold the credits on the charity-care exchange.

FIGURE 4.

Aggressive Collections Practices and Area Income



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Source: 2011 IRS 990 Schedule H form for non-system, nonprofit hospitals.

Note: Analysis is based on the 2011 IRS 990 Schedule H, Part V, Question 16, "Did the hospital facility or an authorized third party perform any of the following actions during the tax year before making reasonable efforts to determine the patient's eligibility under the facility's FAP?" Sample is 2,031 nonsystem hospitals filing IRS 990s. "Aggressive" hospitals will engage in the following activities prior to determining eligibility for charity care: reporting to credit agency, lawsuits, liens on residences, body attachments, or other similar actions.

chosen by the state. Supply, which will likely be provided by hospitals in low-income areas, will generally be guided by the income threshold. Assuming the values for these parameters are chosen so that supply is equal to or greater than demand, then the price will be determined by what a hospital in a low-income area would have expected to collect from these patients if they had billed for services rather than providing charity care through the exchange.

Box 1 highlights several important features of the proposal. First, it demonstrates the important interaction between the charity-care floor and the income threshold. Together these thresholds dictate the degree to which charity care and financial resources are shifted both between hospitals and across patients. Second, it shows how charity care is better targeted to poorer patients. An important feature of our baseline proposal is that it is intended to be neutral with respect to the existing charity-care costs of the hospital sector. That being said, there are some clear gains and losses from the proposal. The biggest gains will be for lower-income individuals who currently are billed for medical services but, under our proposal, will gain eligibility for charity care. However, their gains are offset to some extent by relatively higher-income individuals who will no longer be eligible for charity care. Under the relatively weak assumption that charity care is more valuable when provided to poorer individuals, this shifting of eligibility leads to net welfare gains.

A second potential source of gains and losses comes from the change of the composition of activities for hospitals that have to purchase credits and those that receive a cash infusion from the sale of charity-care credits. It is not immediately clear how hospitals will reallocate their community-benefit dollars. Consider first the case of hospitals, largely in wealthier markets, that are likely to fall short of meeting the charity-care threshold. These hospitals will either have to find additional low-income individuals in their local market who qualify for charity care (perhaps from their existing pool of bad debt patients) or purchase charity-care credits from other hospitals that have excess supply of charity-care patients. To offset these costs, the hospitals may either accept a hit to their bottom lines; or decrease the amount of other community-benefit activities such as community health building, teaching, or research; or both. Of course, hospitals with large populations of poor patients will be on the receiving end of charity-care credit purchases. In addition to increasing the amount of charity care that they provide to lower-income patients, these hospitals may use this cash infusion to provide additional community benefits that they were financially unable to provide prior to the existence of the floor-and-trade exchange.

There may be concerns that the welfare losses associated with reductions in other community-benefit activities made by hospitals in wealthier markets could more than offset the

welfare gains from the geographic reallocation of charity care. This seems unlikely however, for two reasons. First, hospitals in wealthier areas tend to have sufficient resources so that any reductions in other community-benefit activities would be small relative to the increase in community benefits provided by hospitals in lower-income communities. Second, if hospitals in wealthier areas do cut spending on other community-benefit activities, they are likely to cut where such cutting has the smallest benefit.

ADDITIONAL CONSIDERATIONS

In designing, implementing, and administering a floor-and-trade system, states will have to consider a range of options in defining charity care, defining credits for charity care, and structuring transfers. Here we provide alternatives for states to consider in making these decisions.

Defining Charity Care

1. Treatment of undercompensated care from Medicaid or other indigent care programs

Under current IRS regulations, underpayments from Medicaid are counted as a community benefit. In 2011 these payments amounted to over 3 percent of hospital operating expenses. Under our baseline proposal, we consider charity care only as it is currently defined by the IRS—in other words, care for which hospitals neither seek nor receive payment. However, there are many reasons why states may also want to provide incentives for hospitals to treat Medicaid patients. This is particularly true in a post-ACA world where state Medicaid rolls have expanded dramatically as a result of the ACA expansion and the share of the population that is uninsured continues to fall. As the rate of publicly insured individuals increases, states may be concerned about the ability of the newly insured to access hospital services.¹⁶

2. Treatment of bad debt from uninsured patients

We do not believe that bad debt from patients that are uninsured should count toward charity care. Once a hospital seeks payment from a patient, patients' medical bills should be permanently excluded from the pool of available charity-care credits.

3. Treatment of shortfalls from Medicare

There is an ongoing debate about whether hospitals lose money in treating Medicare patients. In considering whether to include any shortfalls, we note three related facts. First, for-profit hospitals actively chose to serve Medicare inpatients. This behavior suggests that these patients have a positive effect on hospital profits. Second, hospitals also provide outpatient services in conjunction with inpatient services, and there is much less debate about the profitability of the former. Finally, given the manner in which Medicare reimbursements are

determined, those hospitals with large shortfalls from this program are likely to be inefficient. Therefore, we do not believe any purported shortfalls from specific Medicare patients accord with the idea of charity or are necessarily evidence of nonprofit behavior.

4. Treatment of other forms of subsidized health services or community health provision

We believe this decision should be left up to the individual states. It is easy to imagine that subsidized preventive care could be creating value if it obviates the need for free hospital care, and that states may desire to provide a safety net for this care in addition to emergency medical services. However, we do note that the details of how this type of extension would be monitored are likely to be complex and cumbersome.

Defining Credits for Charity Care

For a more traditional cap-and-trade credit system, it is straightforward to define the unit of credit for the purposes of trading. For example, when establishing the sulfur dioxide cap-and-trade systems, firms were allocated the right to produce a certain number of tons of pollutant. Firms could then sell the rights to produce this pollution to other firms; these incentives result in the firms with the lowest marginal cost of reducing pollution taking steps to limit the amount of sulfur dioxide they emit and selling their credits to higher-cost firms. However, in our setting the appropriate unit of a credit is not immediately clear. Specifically, should we consider charity care based on the cost to the facility of providing the care or on the type/amount of care that it provides?

Our baseline approach is to follow current practice, whereby hospitals combine information about charges and cost-to-charge ratios (obtained from Worksheet S-10 of the Medicare Cost Reports; Centers for Medicare & Medicaid Services [CMS] 2010) to compute the value of charity care. While this method may produce only a rough approximation of actual economic costs, it has the advantages of familiarity and standardization. There are at least two disadvantages of this method, or any other cost-based measure of charity care. First, it rewards inefficiency, in the sense that if two hospitals provide free care to identical patients, the less-efficient hospital will be credited with more charity care. Second, hospitals may manipulate their Medicare Cost Reports in order to inflate the amount of charity-care services they are currently providing. However, it is unclear what cost-based measure of care that is widely available is superior to the accounting-based measure currently used by Medicare.

An alternative to using accounting costs is to establish some type of fixed price schedule to establish the value of various units of care rather than using the hospital's specific dollar value of the cost of providing that care. For example, a state

could use a diagnosis-related group (DRG)-based price schedule to specify the value of charity-care services. This approach offers several advantages. First, all hospitals are familiar with DRG pricing. Second, it is easy to standardize, but it is also easy to customize—for example by making local wage adjustments (as is currently done by Medicare for its hospital reimbursements). Finally, and unlike a cost-based system, it rewards efficient hospitals, because they will expend fewer resources for each dollar of charity-care credit.

The latter efficiency may be especially important in our exchange system, as a simple example shows. Suppose we have a DRG-based system where the charity-care credit associated with an inpatient admission with DRG weight of one is \$5,000. Hospital A is considering whether to provide charity care in-house or to fund charity care at Hospital B. It costs A \$5,200 to treat a patient with a DRG weight of one. It costs B only \$4,800. Then A can obtain its \$5,000 more cheaply by paying B to provide charity care. For example, if A transfers \$5,000 to B, then A saves \$200 while B makes a profit of \$200. While this may not increase the total amount of charity care that is provided (presumably A will transfer just enough to reach its charity-care threshold), it will reduce the total societal cost of producing health services and give hospitals an economic incentive to become more efficient. One proviso, which is true for all fixed-price systems (e.g., the entire Medicare system), is that lower-cost hospitals may get that way by sacrificing quality.

Structuring Cash Transfers

There are two primary means by which hospitals can transfer money to satisfy their charity-care obligations under a floor-and-trade system. First, hospitals could transfer money directly between themselves. For example, in the scenario presented in Box 1, if Burns Memorial was \$100,000 below its charity-care floor and HFP was \$500,000 above its floor, Burns Memorial could directly transfer money to HFP, leaving Burns only \$400,000 above its floor.

A second structure is for the state to establish a regulated pool of charity-care funds. Hospitals that provide care in excess of their floor can post credits for this care to the state exchange. Then hospitals that find themselves below their floor can purchase credits from the exchange. An advantage of this structure is that it would allow the state to implement more-sophisticated market designs. For example, in the scenario presented in Box 1, such an exchange would allow for a more-flexible threshold for family income for patients that would qualify for charity care. Under such a system, hospitals that provide charity care in excess of their threshold would submit all of that care to the state exchange. Credits for this care could be ordered based on the family income of the patients and trades could be executed in ascending order of income. While a fixed threshold for charity care requires legislators to predict the amount of care demanded at various income levels, this more-flexible system would allow the charity-care exchange to adapt to different macroeconomic shocks.

Chapter 4. Estimating Regulatory Standards for a Floor-and-Trade System

As described above, in our baseline proposal the first step for states is to choose the charity-care floor and income threshold. These values will largely determine the magnitude of the welfare gains from our proposal. Setting a higher floor would lead hospitals that are providing less charity care, which are, on average, located in higher-income areas, to transfer more money to the hospitals providing more charity care, which are, on average, in lower-income areas. At the same time, hospitals in poorer areas will create credits to sell on the exchange by choosing not to seek payment from some low-income patients and instead classifying them as charity-care patients. Setting a lower-income limit will temper the incentives of the higher-income hospital to meet the floor by serving higher-income patients for no compensation within its own market.

In setting the charity-care floor, state lawmakers will need to consider a variety of factors, including local and state property tax rates, the unmet demand for charity care, and the state's relative preferences for charity care, research, teaching, and other community activities. States may set a relatively high floor, so that if total spending on community benefits remained the same there would be a net transfer of community-benefit activities away from research and other community-benefit activities toward charity care. But this shift may not be necessary if the floor can be set as charity-care neutral so that the total amount of charity care remains unchanged.¹⁷ That is to say, our proposal can improve social welfare even if a state requires the hospital sector to continue to provide the same absolute amount of charity care as a percentage of operating expenses. As a result, our proposal need not be construed as a sector-specific tax, although losses and gains will be distributed among hospitals, as we discuss below. The location of charity care would shift across hospitals, and the welfare improvement would arise because this shift leads to a more efficient targeting of charity care.¹⁸

By examining the distribution of charity care across hospitals, we gain a better sense of how a charity-care floor will shift charity-care spending. Table 3 contains the average amount of charity care currently provided in each state, expressed as a percent of operating expenses. The average hospital charity-

care spending is 2.3 percent of operating expenses. There is much variation around this level, however. Hospitals at the 10th percentile of the distribution provide only 0.56 percent of their operating costs as charity care, while the 90th percentile hospital provides 4.63 percent. This variation suggests that even if the total charity-care activities remained constant—in other words, if the floor were set so that 2.3 percent of all hospital expenses were devoted to charity care—there would be economically meaningful transfers across hospitals. Note that the charity-care-neutral floor varies considerably across states, from 3.7 percent for the state at the 90th percentile to 1.1 percent for the state at the 10th percentile.

However, a state need not choose a charity-neutral floor. For example, states wishing to ensure that 100 percent of patients whose incomes are below the income threshold have access to charity care could set a higher floor. (Recall that many hospitals bill at least some patients whose incomes are below their charity-care threshold, and that this rate of billing is higher in lower-income markets.) Table 4 contains the calculated charity-care floors that would ensure that all current patients below the statewide income threshold are able to receive charity care. Across the nation as a whole, accounting for the bad debt currently being generated by charity-care-eligible individuals would increase the charity-care floor from approximately 2.3 to 3.3 percent of operating costs.

When selecting the threshold, policymakers will need to consider the generosity of their existing social insurance programs, the existence of other indigent-care programs, and the average income among those who are currently uninsured in the state. Obviously, the higher the threshold, the greater will be the number of patients who will be eligible for charity care. Just as states can set a charity-care-neutral floor for hospitals, they also can set a charity-care-neutral income threshold for patients, a threshold that will leave unchanged the total number of patients eligible for charity care.

We provide estimates of the number of patients currently eligible for charity care. To conduct this analysis, we use the hospital-provided thresholds for patient eligibility, noting that hospitals sometimes billed these patients for care. In other words, some patients who paid some or even none of their bills were charity-

TABLE 3.

Charity Care as a Percent of Operating Costs

State	Mean	10th percentile	90th Percentile
US	2.30	0.56	4.63
AK	1.95	1.63	20.25
AL	2.12	0.16	5.02
AR	3.61	0.78	5.76
AZ	1.39	0.00	2.45
CA	1.67	0.19	3.83
CO	2.60	0.13	5.18
CT	1.03	0.03	2.18
DC	1.07	0.07	1.89
DE	1.32	0.84	2.14
FL	3.67	1.15	8.32
GA	3.73	0.52	8.34
HI	0.32	0.00	2.52
IA	1.68	0.44	2.85
ID	1.80	0.91	2.32
IL	2.50	0.92	5.53
IN	2.66	1.12	8.67
KS	2.41	0.21	3.81
KY	3.68	1.11	6.12
LA	0.80	0.09	2.60
MA	1.20	0.31	2.67
MD	2.77	0.78	5.88
ME	2.14	1.06	4.22
MI	1.31	0.17	2.77
MN	1.27	0.22	2.74
MO	1.96	0.35	3.06
MS	3.10	0.00	4.36
MT	2.82	0.34	3.75
NC	3.52	0.58	6.33
ND	1.48	0.15	1.45
NE	1.66	0.14	2.37
NH	2.54	1.32	4.54
NJ	3.33	0.30	4.89
NM	3.01	0.44	8.94
NV	3.47	0.48	3.77
NY	1.19	0.10	2.73
OH	2.48	0.65	4.69
OK	2.50	0.22	5.80
OR	3.80	2.20	5.53
PA	0.73	0.13	2.26
RI	3.05	0.84	3.41
SC	3.72	1.30	6.16
SD	1.16	0.01	1.46
TN	3.89	0.82	6.72
TX	3.16	0.58	7.68
UT	1.50	0.08	4.23
VA	3.36	0.79	6.83
VT	1.06	0.71	1.91
WA	1.23	0.19	3.44
WI	1.51	0.40	2.41
WV	2.23	0.10	3.68
WY	5.06	2.37	5.56

Source: 2011 IRS 990 Schedule H form for non-system, nonprofit hospitals.

TABLE 4.

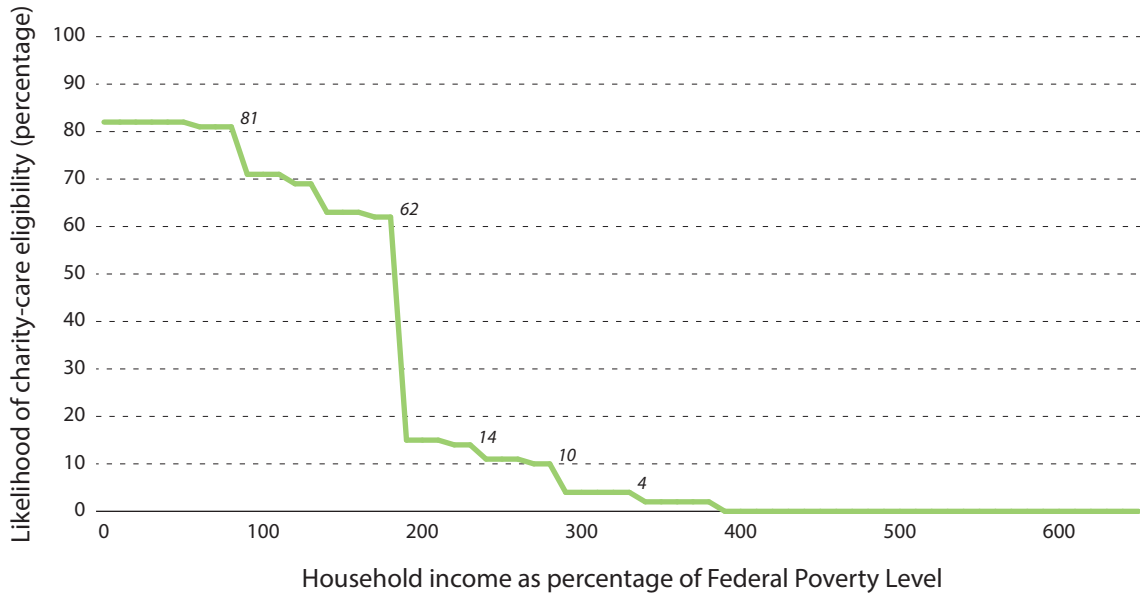
Charity Care and Charity-Care-Eligible Bad Debt as a Percent of Operating Costs

State	Mean	10th percentile	90th Percentile
US	2.80	0.45	6.45
AK	3.84	1.95	20.94
AL	3.29	0.50	6.80
AR	5.20	2.01	10.70
AZ	1.72	0.00	4.23
CA	2.51	0.20	4.46
CO	2.83	0.13	6.21
CT	1.35	0.03	3.51
DC	1.12	0.07	2.60
DE	1.32	0.84	2.14
FL	5.40	1.78	10.23
GA	4.76	0.72	11.22
HI	0.35	0.10	2.52
IA	2.03	0.51	3.22
ID	2.03	0.94	3.15
IL	3.33	1.20	6.45
IN	3.11	1.20	8.82
KS	2.74	0.34	3.81
KY	4.83	2.20	8.88
LA	1.25	0.09	3.45
MA	1.35	0.55	2.88
MD	3.11	1.26	6.67
ME	2.41	1.31	4.93
MI	2.29	0.47	3.84
MN	1.40	0.23	2.89
MO	2.82	0.58	5.54
MS	4.09	0.23	8.10
MT	3.55	0.42	4.34
NC	4.66	0.61	10.01
ND	1.78	0.40	2.73
NE	1.98	0.41	3.24
NH	2.88	1.47	4.65
NJ	4.10	0.56	6.11
NM	5.24	1.18	11.89
NV	11.74	0.48	12.66
NY	1.70	0.24	3.25
OH	2.71	0.87	5.07
OK	5.39	0.42	8.71
OR	5.26	2.30	7.38
PA	1.54	0.27	3.42
RI	3.63	0.95	4.61
SC	6.07	1.30	10.68
SD	1.82	0.03	6.94
TN	5.59	1.36	11.58
TX	4.75	0.58	9.48
UT	3.06	0.74	4.57
VA	3.92	1.45	7.85
VT	1.36	0.99	2.65
WA	1.42	0.40	3.44
WI	1.70	0.73	3.36
WV	2.58	0.10	4.26
WY	5.51	5.26	5.56

Source: 2011 IRS 990 Schedule H form for non-system, nonprofit hospitals; and authors' calculations.

FIGURE 5.

Charity-Care Eligibility by Household Income



Source: 2011 IRS 990 Schedule H form for non-system, nonprofit hospitals.

Note: Analysis determines the share of households under the FPL cutoff for hospitals in their HSA. Sample of hospitals is restricted to the 3,069 facilities (system and nonsystem) providing an FPL cutoff response to Schedule H, Part V, Question 9, "Used federal poverty guidelines (FPG) to determine eligibility for providing free care?" Sample of HSAs is restricted to HSAs with in-sample hospitals.

care eligible, even if they were classified as paying patients or those with bad debt. By accounting for these patients, along with the true charity-care patients, we are able to estimate the likelihood that a family at a particular income level is eligible for charity care. These results are presented in figure 5. Looking across all hospitals, we find that the likelihood of charity-care eligibility is a declining function of income and that this likelihood decreases substantially at several income thresholds that are commonly chosen by hospitals. For example, 60 percent of individuals with incomes below 190 percent of the FPL are eligible for charity care, but only 15 percent of individuals just above this threshold are eligible.

We can now calculate the income threshold that would keep constant the number of patients eligible for charity care (i.e., the eligibility-neutral income threshold). We start by calculating a single national threshold. Based on the distribution of household income and the share of households eligible for charity care, we calculate that a national income threshold for charity care of 155 percent of the FPL would leave the same share of households eligible for charity care but increase the percentage of lower-income patients that are eligible for charity-care services. In other words, with an estimated 29.5 percent of patients eligible to receive charity care, setting the national income threshold for charity care at 155 percent would be eligibility-neutral but would increase the share of lower-income patients that are eligible for charity-care services. More

specifically, 7 percent of those eligible for charity care would be newly eligible households with incomes below 155 percent of the FPL (who were previously ineligible because they lived in poorer communities with high demand for charity care), and the same share of households would lose eligibility (those with incomes above 155 percent of the FPL that previously were eligible for charity care because they live in higher-income communities whose hospitals currently set higher income thresholds).

Recognizing that states will choose their own eligibility-neutral threshold, table 5 reports these state-specific thresholds. Column (1) of table 5 (Average FPL cutoff) contains the current average threshold as a percentage of the FPL in each state. This ranges from a low of 125 percent of FPL in Utah to a high of 232 percent in Connecticut. Column (2) reports the eligibility-neutral thresholds. These range from a low of 112 percent of FPL in Idaho, where 5.2 percent of the state population are eligible for charity care, to 196 percent in Connecticut, where 5.9 percent are eligible. Column (3) contains the percentage of the population that is eligible for charity care at the current thresholds. This ranges from a low of 19 percent in Idaho to 35 percent in California and Florida. Column (4) contains the percentage of the population that would gain (and lose) eligibility in each state. Column (5) contains that percentage of patients who cannot pay their bills that are eligible for charity care. This ranges from a low of 0 percent in Delaware to 47 percent in Alaska.

TABLE 5.

Proposal Parameters by State

State	Average FPL cutoff	Eligible share neutral FPL cutoff	Percent Charity-Care Eligible	Percent Gaining Eligibility	Unmet Charity-Care Demand
US	181	155	29	7.0	0.22
AK	150	146	23	4.3	0.47
AL	171	138	29	6.9	0.29
AR	153	116	23	6.8	0.25
AZ	169	140	26	6.7	0.06
CA	225	195	35	7.4	0.17
CO	148	152	24	6.0	0.06
CT	232	196	30	5.9	0.14
DC	210	179	26	3.8	0.02
DE	206	143	23	6.5	0.00
FL	205	160	35	7.2	0.29
GA	153	129	26	6.1	0.10
HI	181	150	25	6.3	0.02
IA	172	150	23	5.0	0.08
ID	144	112	19	5.2	0.08
IL	189	163	28	5.9	0.19
IN	182	148	28	6.7	0.09
KS	147	138	25	6.2	0.09
KY	139	146	28	8.5	0.20
LA	176	145	31	6.9	0.15
MA	213	185	29	4.5	0.10
MD	208	167	24	4.5	0.08
ME	180	143	25	5.3	0.08
MI	181	145	29	6.4	0.21
MN	171	184	29	6.4	0.06
MO	155	136	25	6.8	0.20
MS	133	112	25	8.1	0.13
MT	140	116	23	6.5	0.15
NC	180	159	30	7.6	0.17
ND	138	142	22	4.8	0.06
NE	141	167	28	7.1	0.10
NH	210	177	28	5.1	0.09
NJ	205	177	28	5.0	0.17
NM	175	147	30	7.1	0.24
NV	200	165	30	5.8	0.46
NY	191	138	25	8.3	0.17
OH	159	137	24	6.7	0.05
OK	175	135	25	7.1	0.18
OR	172	150	26	5.9	0.34
PA	193	155	27	6.5	0.24
RI	200	160	27	4.7	0.20
SC	203	172	35	8.3	0.27
SD	136	124	21	5.4	0.16
TN	166	138	28	7.2	0.15
TX	179	150	29	6.6	0.07
UT	125	126	21	4.0	0.36
VA	174	160	24	4.7	0.12
VT	218	173	31	6.3	0.09
WA	175	165	25	5.5	0.10
WI	178	145	24	5.8	0.07
WV	157	112	21	6.3	0.08
WY	150	142	23	4.9	0.04

Source: 2011 IRS 990 Schedule H form for non-system, nonprofit hospitals; and authors' calculations.

Chapter 5. Questions and Answers about the Floor-and-Trade Proposal

In this section we address a number of additional questions about the floor-and-trade proposal.

Why should charity-care credit markets be organized at the state level?

There are both practical and economic reasons for the implementation of this system at the state or regional level. First, as discussed above, the more-stringent existing regulations of community-benefit activities exist at this level. Second, the uneven distribution of income across states means that the most efficient income thresholds could be quite different and the imposition of a blunt national limit may limit some of the potential efficiencies of this proposal. A final important political consideration is that a national standard and market for tradable credits could result in large transfers from states with higher average incomes to those with lower average incomes. Because many of the tax breaks that nonprofit hospitals receive are at the state or local level, these interstate transfers could be construed as unfair and may decrease the political attractiveness of this proposal.

Could multiple states join together to create a marketplace for tradable credits?

This could be attractive to some states for a number of reasons. First, in some places hospitals treat many patients from out of state and therefore the expenditures of nonprofit hospitals benefit patients that reside in multiple jurisdictions. This is particularly relevant for large, multistate metropolitan areas. Second, states could share in the fixed costs of setting up a marketplace, a feature that should be particularly attractive to smaller states. Finally, the market for tradable credits will be thicker when there are more participants and therefore prices will be more stable in these larger marketplaces.

There are, however, a number of complications that would need to be addressed. In particular, the participating states would need to be able to arrive at mutually agreeable levels for the charity-care floor and the income threshold. If the states have differing populations, policy goals, or other safety net policies, reaching such an agreement might be difficult. For a multistate marketplace to effectively function, participants might need to make politically infeasible commitments. For

example, a crudely constructed multistate exchange would create incentives for states to scale back their Medicaid programs, and instead treat these patients as charity care. Doing so would expand the supply of charity-care credits in their own state, leading their state's hospitals to earn more on the charity-care exchanges. The revenue lost from the resulting lower price of charity-care credits would be partially borne by hospitals in other states.

How should operating costs be determined?

All hospitals are obligated to report operating costs to Medicare using a unified methodology culminating with Worksheet G2 of the Medicare Cost Reports (CMS 2010). Many hospitals believe that this method does not provide accurate cost estimates and, as a result, some hospitals employ proprietary cost accounting systems. Medicare Cost Reports may be imperfect, but we believe this limitation is outweighed by the benefits of uniformity and transparency afforded by the Cost Reports.

How do we treat system hospitals?

While the estimates presented in the paper do not apply to hospital systems, these facilities are an integral part of the nonprofit safety net. Under our proposal, systems will be treated as a single entity for the purposes of calculating whether they meet their charity-care floor obligations. That being said, many systems operate in multiple states and this may complicate the state-based administration of the floor-and-trade proposal. Therefore, we recommend that the portion of a system's hospitals that is in a state be treated as one hospital for the purposes of determining its obligations under the floor-and-trade proposal.

Should hospitals be allowed to bank credits?

One question is whether hospitals must reconcile any surplus or deficit in charity care at the end of the calendar or fiscal year. Two factors weigh in favor of allowing for bankable credits. First, in small states there may be years with relatively little trading of credits. Second, given that there are differences in hospital fiscal years, there could be time periods within the year in which some hospitals need to purchase credits but others are not offering credits for sale. The combination of thin markets and temporal mismatches could result in artificial

price spikes for charity-care credits. To limit these spikes, we recommend that hospitals be allowed to bank or borrow their charity-care credits, up to a predetermined limit, so as to meet their annual charity-care floor. Hospitals borrowing against the next year would have to pay a modest interest rate, such as that for prime-grade corporate debt. Allowing hospitals to bank or borrow will limit fluctuations in the price of charity care and decrease the complexity of decision making for hospitals, which would otherwise need to worry about exactly hitting the end-of-year target. Furthermore, there are likely to be benefits to consumers from allowing some temporal smoothing. In a recession, aggregate demand for charity care may rise, and hospitals should be able to increase provision and store credit.

Should patients who should have purchased insurance on the exchange qualify for charity care?

The implementation of the ACA has caused a large decline in the number of uninsured Americans. For example, Gallup estimates that the uninsured share of the population fell from 16.3 percent in the first quarter of 2013 to 11.9 percent in the first quarter of 2015 (Levy 2015). Of course, a large fraction of the population remains uninsured. There are a variety of reasons for this lack of complete coverage. Some people are explicitly left out of the market, such as undocumented immigrants and individuals with incomes below 100 percent of the FPL residing in states that did not implement the ACA Medicaid expansion. Another portion of the remaining uninsured qualify for Medicaid but have not taken up coverage. Given that there is no open enrollment period for Medicaid, from the point of view of the hospital, these individuals are effectively insured. If they require expensive medical treatments, they can sign up for Medicaid.

However, some of these uninsured are individuals who have chosen not to purchase insurance on the exchanges and instead choose to pay the fine and remain uninsured. If these people demand medical services they will be unable to sign up for insurance until the next open enrollment period. Allowing care for these individuals to be counted as charity care may incentivize individuals to not purchase insurance on exchanges. This potential moral hazard has been discussed in a variety of settings (Coate 1995; Rask and Rask 2000; Sasso and Meyer 2006).

Hospitals are cognizant of this potential moral hazard, and anecdotal evidence suggests that since the passage of the ACA they have pared back charity care to individuals who are likely eligible for subsidized health insurance. For example, Barnes Jewish Hospital in St. Louis is now charging copayments for services to all individuals regardless of insurance status (Goodnough 2014). Summarizing the view of many hospitals, the chief executive of Henry Ford Health Systems in Detroit said, “Do we allow our charity care programs to kick in if people

are unwilling to sign up? Our inclination is to say we will not, because it just seems that that defeats the purpose of what the Affordable Care Act has put in place” (Goodnough 2014).

That being said, even if these individuals chose to not participate in the exchange their care is still costly for hospitals that are required, for a variety of reasons, to provide them with medical services regardless of their ability to pay. In considering how to classify uncompensated care for individuals who qualify for the exchange but choose not to purchase coverage states must balance the desire for these individuals to receive treatment with the potential inefficiencies from the moral hazard.

Can for-profit hospitals sell charity care on the charity-care exchanges? What about public hospitals?

While they lack any community-benefit requirements, for-profit hospitals also provide uncompensated care. At a minimum, for-profit hospitals are still bound by EMTALA and must treat emergency patients regardless of their ability to pay. For-profit hospitals seeking payment for these services from the uninsured would represent a cost to these patients. From the perspective of the patient, and for strengthening the social safety net, it does not make sense to immediately limit their care from the exchange. Allowing for-profit hospitals to sell credits in the exchange provides an incentive for these facilities to not seek payment from their lowest-income patients (who likely in expectation would generate more value on the exchange market than the hospital would collect if it billed the patient for the services it provided). Conversely, one may worry that for-profit hospitals are more likely to profitably exploit any limitations in the charity-care exchange market design. Though it is difficult to be sure about the mechanism through which this would occur, allowing for-profit hospitals to sell charity care would increase the need for some regulatory oversight over data reporting and the quality of care for the uninsured.

The case for allowing public hospitals to sell credits on the charity-care exchange is clearer cut. Public hospitals provide large amounts of charity care to indigent patients without compensation. The same logic that suggests for-profit hospitals should be allowed to sell charity care suggests that government hospitals should as well. However, evidence suggests government hospitals are less likely to exploit profitable loopholes in reimbursement schemes (Duggan 2000).

How should bad debt from insured patients be considered?

Traditionally, if hospitals seek payment from a patient and they are unable to collect payment, these costs cannot be counted toward the community benefit. The rationale for this exclusion is as follows: when hospitals bill patients, the expected payments may be sufficiently high so that the hospitals expect to earn positive profits. Indeed, if patients are insured and hospitals are merely attempting to collect the patients’ portion

of the bill, the hospital might earn a profit even if the patient pays nothing. In other words, hospital billing and collection practices are part of a profit-seeking strategy, in which profits from those who pay their bills, and even some patients who do not, offset any losses from nonpaying patients. It is difficult to credit hospitals with charity care for patients from whom the hospitals are expecting to make a profit.

Recent developments in insurance markets provide a reason to revisit this exclusion. In recent years, many patients have shifted into high deductible plans. In particular, the benchmark plans used to determine the ACA subsidies are expected to cover only 70 percent of the average enrollee's medical expenditures. The average individual deductible for these plans is \$2,900 and the average family deductible is \$6,000 (Herman 2014). Within this silver tier, over 90 percent of customers are receiving subsidies and 65 percent of those customers selected the cheapest or the second-cheapest available plan (Assistant Secretary for Planning and Evaluation 2014). In other words,

many individuals who were previously uninsured, and who would have qualified for charity care, are now insured with large deductibles and low incomes. If hospitals are unable to count bad debt toward charity care, they may be unwilling to waive the deductibles. The ironic result would be that some low-income individuals will face medical bills that would have been waived prior to the ACA.

We should note that simply considering the unpaid cost-sharing component of indigent patients as charity care could add meaningful complications to the insurance contracts for these high-deductible plans. Premiums for these plans were likely determined based, in part, on the expected reduction in the utilization of services that come from patients facing large cost-sharing requirements. Given their own contracts with insurers, hospitals may be unable to forgive only the patient portion of these bills, and therefore it may be necessary for hospitals to not seek payment for both the cost-sharing and the insured portion of costs for indigent patients.

Chapter 6. Conclusion

The charity care for tax exemption quid pro quo arrangement between nonprofit hospitals and the government remains an essential element of the U.S. health-care safety net. But there are few explicit rules governing this arrangement, which has left the safety net torn and tattered, with many low-income families amassing large amounts of medical debt following medical shocks. We propose a floor-and-trade system that would both formalize the charity-care obligations of nonprofit hospitals and address the current geographic mismatch between the demand for charity care and the tax benefits that accrue to nonprofit hospitals. The proposal is flexible on many dimensions and can be tailored at the state level to both economic conditions and preferences for charity care.

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Endnotes

1. Nonprofit hospitals are 501(c)(3) organizations, which must meet one of seven exempt purposes outlined by the IRS (2015a) in order to gain an exemption from federal taxes. Nonprofit hospitals generally fall under the 501(c)(3) charitable category through their provision of charity care, although teaching and research may also meet the education and scientific purposes, respectively. State and local governments may determine the requirements for exemption from their respective taxes.
2. For example, Gross and Notowidigdo (2011) find that Medicaid expansions decrease consumer bankruptcy filings. Similarly, a recent randomized trial of a Medicaid expansion in Oregon found sizeable reductions in medical debt and increases in financial stability for the newly insured (Finkelstein et al. 2012). Given that eligibility for this expansion was limited to individuals earning less than 100 percent of the federal poverty level (FPL), this study demonstrates that the safety net does not protect the least fortunate Americans from high health-care bills. The uninsured may also receive inferior quality medical care. For example, Doyle (2005) found that uninsured individuals in car accidents receive 20 percent less care and have a higher mortality rate than their insured counterparts.
3. More than 56 percent of U.S. hospitals are nonprofit, while another 23 percent are operated by government entities, and only 21 percent are for profit.
4. Washington State does not exempt nonprofit hospitals from state income taxes. Alabama, California, Louisiana, North Carolina, Oklahoma, Washington State, and West Virginia do not exempt nonprofit hospitals from sales taxes. In all states, nonprofit hospitals may be eligible for the property tax exemption (Hilltop Institute 2015).
5. As of 2012 nonprofit hospitals are required to conduct a community needs assessment every three years and develop a strategy to implement this community needs assessment. Hopefully, these assessments will help to ensure that hospitals choose an appropriate mix of community benefits to best suit the needs of their community. On its own, this type of a floor does not address the inability of hospitals in the poorest of markets to fund a socially optimal level of community benefit.
6. In this ruling, the IRS set out five criteria for defining whether a hospital satisfied its community benefit. According to the Government Accountability Office (GAO), “These five factors were (1) the operation of an emergency room open to all members of the community without regard to ability to pay; (2) a governance board composed of community members; (3) the use of surplus revenue for facilities improvement, patient care, and medical training, education, and research; (4) the provision of inpatient hospital care for all persons in the community able to pay, including those covered by Medicare and Medicaid; and (5) an open medical staff with privileges available to all qualifying physicians. IRS further stated that tax-exempt status would be determined based on the facts and circumstances of each case, and that neither the absence of particular factors set forth in the 1969 revenue ruling nor the presence of other factors would be necessarily conclusive” (GAO 2008, p. 11). In 1983 the IRS eliminated the requirement that hospitals operate an emergency room in exchange for nonprofit status (GAO 2008).
7. While hospitals are currently able to make cash contributions to other providers to satisfy their community-benefit obligations, there are relatively few of these transfers. This lack of transfers occurs for at least two reasons. First, under the current system hospitals can only transfer cash on a dollar-for-dollar basis, but they may value other services they can provide at their facility more than charity care at another facility. Under our system, prices could often be well below the cost of providing care, providing an incentive for hospitals to purchase credits. Second, hospitals face few explicit requirements to provide charity care and thus have little reason to transfer these funds.
8. Our analysis relies on the 2011 IRS Form 990s. Because hospital systems, rather than individual hospitals, file an IRS 990, we restrict the sample to 2,031 general acute-care hospitals that are not part of systems; these account for over half of all nonprofit hospital spending. This enables us to assign each hospital to a single Dartmouth Atlas hospital service area (HSA). HSAs are relatively tight geographic market definitions, roughly corresponding to a hospital’s catchment area. For each HSA we calculate an average household income and the income distribution of households relative to the FPL. The IRS 990s contain a wealth of information on the finances of nonprofits, including the community benefits that they provide. We describe the specific data fields that we use in our analysis when they are pertinent, but a general point that we discuss below is that the IRS measures community benefit as accounting costs minus any direct offsetting revenues. As a specific example, if a hospital bills a patient for \$12,000 and the hospital’s costs are estimated to be two-thirds of those charges, then this would count as \$8,000 in costs. If no collection attempt was made on this patient, then this could count as \$8,000 in community benefit. By contrast, if the hospital successfully collected \$1,000 from the patient, then the bill would count as \$7,000 in bad debt, which is not considered part of the community benefit. A similar accounting method is used for most other measures of community benefit.
9. Our results in this figure stand in contrast to the findings in Young et al. (2013), who analyzed similar data for the year 2009, but find no relationship between the level of composition of community benefit and local market characteristics. The discrepancy may have occurred for three reasons. First, we use different years of data. By checking against 2009, however, we confirmed this is not the explanation. Second, we use different market definitions: we use HSAs and Young et al. use counties. Arguably, HSAs are more appropriate for this analysis. Finally, Young et al. (2013) include both local market income and local uninsured rates as covariates in a regression. The two almost certainly have a high level of multicollinearity; each is a marginally significant predictor in Young et al.’s analysis. The manner in which these results are presented makes it impossible to determine whether they find an economically meaningful relationship.
10. The analyses in figures 2 and 3 have been adjusted to eliminate cross-state variation in income.
11. This should not be surprising. IRS data show that hospitals in markets in the lowest-income quintile are almost 50 percent more likely to pursue aggressive collections activities before determining a patient’s eligibility for charity care than are hospitals in the highest-income quintile.
12. We broke total uncompensated care costs into three components: (1) uncompensated care that counts toward community benefit (i.e., charity care and shortfalls on means-tested government patients), (2) bad debt, and (3) shortfalls on Medicare patients. Across these components, a consistent theme is that hospitals in lower-income markets are providing more care at a loss. The largest driver of the relationship between uncompensated care and market income is bad debt, with a slope of -0.402 . These results present a first piece of evidence that there is more unmet need for care in lower-income markets and therefore that constrained hospitals in lower-income markets need to be less generous in their decision about whether to provide true charity care or whether to pursue repayment.

13. We note that the option is already available for states to establish multistate insurance exchanges under the ACA.
14. If the only objective of a hospital were to obtain the necessary charity-care credits at the lowest costs, then the floor alone would provide the necessary market incentives for charity care to be allocated to the poorest of patients. However, hospitals may prefer to provide charity care to a higher-income local population over a lower-income population of patients of other hospitals. The income threshold limits a hospital's ability to do so, providing a second incentive to ensure that charity care flows to those in greatest need.
15. As a practical matter, we recommend allowing hospitals to make payments to states with one dollar of payment providing a dollar of charity-care credit, as a backstop in case some hospitals are unable to purchase the charity-care credits that they require.
16. The current literature on the effect of expansions of public insurance on provider behavior is sparse and is focused on physicians rather than hospitals. Garthwaite (2012) finds that pediatricians reduced their labor supply following the creation of the State Children's Health Insurance Program (SCHIP), likely as a result of crowd-out of their marginal patient from private insurance to Medicaid. In a setting with far less crowd-out, changes in the availability of Medicaid dental benefits, Buchmueller, Orzol, and Shore-Sheppard (2015) find no change in dental labor supply but an increase in the use of midlevel providers (i.e., dental hygienists).
17. However, it should be noted that without a requirement on the provision of other community benefits, spending for these categories could decline even with a charity-care-neutral threshold.
18. Importantly, this proposal provides more-effective targeting than the ability under the current system to count cash transfers toward a community benefit. Under a charity-care exchange, policymakers can ensure that these cash transfers are targeted at individuals who currently fall through rather sizeable holes in the social safety net.

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Highlights

David Dranove, Craig Garthwaite, and Christopher Ody propose a floor-and-trade system to strengthen the health-care safety net for hospitals providing charity care. Such a system would aim to replace the current geographic mismatch in which nonprofit hospitals in higher-income areas enjoy large tax benefits, while hospitals in poorer communities face the largest demand for charity care.

The Proposal

States to Establish State-Level Charity-Care Floors and Income Thresholds. Each state would set its own charity-care floor as a percentage of operating costs. Each state would also set an income threshold above which uncompensated care would not be considered as charity care for the purposes of meeting the floor. State customization would allow adjustment for regional variation in preferences and need.

States to Oversee State-Level Charity-Care Credit Exchanges. Once state lawmakers have set a charity-care floor and an income threshold, states would create a tradeable credit system. By enabling hospitals to trade charity-care credits, the proposal would incentivize hospitals in low-income areas to provide more charity care, and would allow hospitals in relatively high-income areas to be able to provide care for poorer patients

Benefits

This proposal would shift provision of charity care toward the lowest-income segment of the population. States will also have the option to increase overall charity-care provision, if they determine that it is of particular value to their population. Unlike previous attempts at setting a universal charity-care floor, this proposal would allow for state customization and a trade system that allows each hospital to serve the poorest patients in its state.



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