

**The Operating Margins of Urban  
Safety-Net Hospitals and the Projected  
Impact of Reductions of Medicare DSH on  
Those Operating Margins**

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# The Operating Margins of Urban Safety-Net Hospitals and the Projected Impact of Reductions of Medicare DSH on Those Operating Margins

## Executive Summary

The National Association of Urban Hospitals (NAUH) has examined the financial condition of urban and rural hospitals, analyzed the impact of federal Medicare disproportionate share hospital payments (DSH) on hospital financial performance, and projected the potential impact of the loss of Medicare DSH revenue on future hospital financial performance.

### Hospital Operating Margins

NAUH compared the operating margins of similar groups of hospitals, comparing urban DSH hospitals to rural DSH hospitals; large (more than 100 beds) urban DSH hospitals to large rural DSH hospitals; and large urban DSH hospitals that provide at least 15 percent of their services to Medicaid recipients to similar large rural DSH hospitals. Operating margins are important because hospitals need positive operating margins to survive; if their operating margins are negative, they are losing money and cannot expect to survive for long.

In every comparison between types of urban and rural hospitals, rural hospitals have significantly higher operating margins – often, positive operating margins. The operating margins of rural DSH hospitals, for example, are 25 times higher than those of urban DSH hospitals. No urban hospital group has positive operating margins, and most have dangerously negative operating margins. Of all of the types of hospitals, large urban DSH hospitals and large urban DSH hospitals that provide at least 15 percent of their services to Medicaid recipients have the worst margins by far.

### Medicare DSH: Failing to Achieve its Mission

The purpose of Medicare DSH is to ensure the survival of hospitals needed to care for Medicare beneficiaries in communities with many low-income and uninsured residents. While NAUH found that for rural hospitals, the more Medicare DSH revenue they receive as a proportion of their overall Medicare revenue, the higher their operating margins are likely to be, we also found that *the more Medicare DSH revenue that urban hospitals receive as a proportion of their overall Medicare revenue, the lower their operating margins are likely to be*. This suggests that today's Medicare DSH program is not meeting its objective because its payments to urban DSH hospitals are inadequate – so inadequate that they are jeopardizing the continued existence of these hospitals.

## **The Effect of the Loss of Medicare DSH Revenue**

Because Medicare DSH has been a popular target among those interested in reducing federal Medicare spending in recent years, NAUH examined how the loss of this revenue might affect hospital financial performance. In every comparison we made between similar groups of urban and rural hospitals, the gap in operating margin between urban and rural hospitals increases as they lose Medicare DSH revenue. As those gaps widen, the operating margins of urban DSH hospitals fall so low that their future financial viability becomes very questionable.

### **Conclusion**

NAUH's demonstration that the financial condition of urban hospitals is worse than that of rural hospitals contradicts many common assumptions underlying today's health care debates in Washington. This research also demonstrates the inadequacies of the current Medicare DSH program, which severely underpays urban DSH hospitals. Unless that underpayment is addressed, many of those hospitals will not survive. Because it is in the national interest to preserve these large urban DSH hospitals, NAUH believes that steps should be taken to increase Medicare DSH payments to qualified urban DSH hospitals.

## I. Introduction

As one of the most expensive and fastest-growing programs in the federal budget, Medicare is under constant review and scrutiny by officials, both elected and appointed, who would like to slow its rate of growth or even reduce its overall cost. They clearly are concerned about the program's financial health, mindful that the aging of the baby-boom generation will soon place unprecedented demands on Medicare's – and taxpayers' – resources. In recent years, there have been numerous attempts to reduce federal Medicare spending; some have succeeded and others have failed.

A popular target among those interested in reducing federal Medicare spending is the Medicare disproportionate share hospital program, commonly referred to as Medicare DSH. Medicare DSH payments are made to selected hospitals that care for especially large proportions of low-income patients. The rationale for Medicare DSH payments is that because these hospitals treat so many low-income patients, they need special help to ensure their financial viability so they will remain open and able to care for Medicare participants. If these hospitals were to disappear, the argument goes, some Medicare beneficiaries could have difficulty finding care in their own communities.

Medicare DSH payments are not made to hospitals to compensate them directly for specific health care services they provide to Medicare recipients, and for this reason, some argue that they should not be made at all, that Medicare's only responsibility should be to pay for care for Medicare recipients. Proponents of this view argue for the reduction or elimination of the Medicare DSH program. This is an ongoing debate in Washington – a debate that is unlikely to be settled anytime soon.

Because this debate remains unresolved, the Medicare DSH program is almost always on the table when policy-makers consider how to better manage or even reduce overall Medicare spending. Medicare DSH payments also are jeopardized, as will be described later in this report, whenever efforts are undertaken to persuade more Medicare participants to receive their health care benefits through managed care organizations.

Urban hospitals that care for especially large proportions of low-income patients can be viewed as urban safety-net hospitals. Medicare is an important part of their overall revenue and Medicare DSH is an important part of their Medicare revenue, so these hospitals have a significant stake in the outcome of these periodic policy debates. An important consideration that is often overlooked when policy-makers raise the possibility of reducing or eliminating Medicare DSH payments is the potential effect of such a major policy change on this nation's urban safety-net hospitals, and in particular, on its large urban safety-net hospitals. When policy-makers weigh their options on issues like reductions in Medicare DSH, the background information and research with which they work generally describes the broadest implications of proposed policy changes. Seldom do they have access to detailed, specific information about the precise impact that proposed policy changes could have on distinct types of hospitals, let alone on individual hospitals. Instead, most such proposals are made from a purely budgetary perspective, based on how much money they will save the federal government, and are considered only from this narrow perspective.

In the past, NAUH has performed the kind of complex, detailed analysis that is often lacking in these policy debates. Our 2002 report entitled *The Financial Condition of Urban Hospitals* shed new light on the effects of various market factors and government policies on the financial health of the nation's private, non-profit, urban safety-net hospitals – a new light that differs sharply with what often passes as the conventional wisdom in Washington. That study is described in greater detail in the following section of this paper. (The study also can be found at NAUH's web site, [www.nauh.org](http://www.nauh.org), or is available from NAUH upon request by calling 703-444-0989.)

This year, NAUH has engaged in new research that seeks to add to this body of knowledge by projecting how oft-proposed reductions in Medicare DSH payments could, if implemented, affect many different kinds of hospitals.

In this new research, we first examine the operating margins of different groups of hospitals – urban and rural, of differing sizes, and serving different types of communities. We also compare the financial performance of these different groups to one another.

Next, we project the effects of the loss of various increments of Medicare DSH revenue on these hospitals. We do this using 1999 Medicare cost reports and other data – the most recent complete data that is publicly available; data from 2000 is now available, but it is insufficiently complete and accurate to be used for this purpose. We make our projections for hospitals eligible for Medicare DSH based on the revised Medicare DSH qualification criteria that were adopted as part of the Benefits Improvement and Protection Act of 2000 (commonly referred to as BIPA). A more complete description of our methodology can be found later in this paper.

The outcome of this research and analysis is a compelling argument for a more careful, considered approach to the development and implementation of federal health care and Medicare policy – and for the development and preservation of a truly adequate Medicare DSH program.

## **II. Recent NAUH Research**

In our 2002 report entitled *The Financial Condition of Urban Hospitals*, NAUH provided an overview of four critical changes in health care reimbursement practices over the past two decades: the movement from cost-based reimbursement to prospective payment; the movement from fee-for-service to managed care; the repeal of the Boren Amendment; and the growing competitiveness of the health insurance industry. These major changes, coupled with the growing reluctance of the three major categories of health insurers – Medicare, Medicaid, and private insurers – to help hospitals cover the costs of caring for the poor and uninsured, have left those hospitals with the new problem of finding ways to cover those costs on their own. They have been forced to serve, in effect, as the insurers of last resort for their uninsured and underinsured patients. This poses a major financial challenge to many hospitals – and especially, to urban safety-net hospitals.

Next, NAUH analyzed basic data that measures the financial health of the hospital industry as a whole and of specific types of hospitals – including urban safety-net hospitals – in particular. This analysis revealed that based on total margin and operating margin, the primary indicators of hospital financial health, urban hospitals are in worse financial condition – and often, in far worse financial condition – than rural hospitals. The financial performance of urban hospitals is even worse, the data showed, among urban hospitals that provide at least 15 percent of their services to Medicaid recipients. In other words, urban hospitals as a whole perform worse financially than non-urban hospitals and urban hospitals that treat especially large proportions of poor patients perform even worse financially. No matter how NAUH analyzed this data, rural hospitals were always in better financial condition than urban hospitals.

### **III. New Research: The Impact of the Loss of Medicare DSH Payments: Purpose, Rationale, and Methodology**

#### **Purpose**

The purpose of NAUH's latest research is to determine the potential impact on hospitals of the loss of varying increments of their Medicare DSH revenue. Medicare DSH is an extremely important source of revenue for hospitals that qualify for these payments, so the implications of the loss of some or all of this revenue deserve careful analysis and consideration.

#### **Rationale**

NAUH has chosen to examine the implications of the loss of Medicare DSH revenue for several reasons.

First, Medicare DSH revenue is very important to the financial health of private, non-profit, urban safety-net hospitals. It is unlikely that they could survive the loss of this revenue, or the loss of a significant portion of this revenue, although this has seldom been addressed on more than a gross analysis basis. For this reason, this is a legitimate subject to explore.

Second, NAUH has chosen to examine the implications of the loss of Medicare DSH revenue because this is a constant threat in the current environment in Washington. Over the past decade, there have been many attempts to reduce Medicare DSH payments to hospitals. Most notably:

- In 1996, there was an attempt to eliminate completely the Medicare DSH program.
- In 1997, there was a proposal to reduce federal spending on Medicare DSH by 25 percent. Ultimately, the reduction was scaled back to five percent.

- Also in 1997, Congress considered whether to “carve out” Medicare DSH payments in conjunction with the introduction of the Medicare+ Choice program. Such a carve-out would have ensured the preservation of Medicare DSH revenue for hospitals in regions served by Medicare+ Choice. Ultimately, Congress chose to implement a carve-out for indirect medical education (IME) payments but not for Medicare DSH, resulting in the loss of critical Medicare DSH revenue for some urban safety-net (and other) hospitals.

Despite the popularity of Medicare DSH as a target of those interested in cutting federal Medicare spending, there has never been a systematic, detailed, thorough analysis of the potential effects of reducing or eliminating Medicare DSH payments to qualified hospitals. The rationale for past proposals to reduce or eliminate Medicare DSH has always been that such cuts were needed to reduce federal Medicare spending, or to reduce the growth of federal Medicare spending. Cuts have been proposed with budget targets in mind but without regard for the implications of those cuts – that is, implications for hospitals and for the communities that those hospitals serve. When such proposals are considered, policy-makers should have a detailed and in-depth understanding of exactly what their proposed budget cuts could mean for those who would experience those cuts. This study is an attempt to provide that information.

Third, NAUH has chosen to examine the implications of the loss of Medicare DSH revenue for hospitals because such a loss has already begun because of Medicare managed care. Medicare DSH payments are made to qualified hospitals based on the quantity of care they provide to traditional, fee-for-service Medicare beneficiaries. When seniors use their Medicare benefits, Medicare takes into account the hospital that provides this care and, if the provider is eligible for Medicare DSH, it makes supplemental Medicare DSH payments to reflect its concern for the future viability of that provider. Medicare understands that if a provider cares for large proportions of poor and uninsured patients, its future financial viability may be threatened and it could, in theory, not survive – and therefore no longer be able to care for the Medicare-eligible residents of its community. Medicare has a vested interest in ensuring the survival of these hospitals, so it attempts to assure their survival by making Medicare DSH payments to selected, qualified hospitals.

When Medicare beneficiaries who belong to managed care plans receive health care services at Medicare DSH hospitals, however, Medicare does not make Medicare DSH payments to those hospitals on their behalf – and the Medicare managed care organizations that serve them generally do not make direct, discrete Medicare DSH payments to those hospitals, either. Those Medicare managed care organizations view their role as that of ensuring that their Medicare members receive the benefits to which they are entitled at the lowest possible cost; they view the survival of hospitals as government’s responsibility, not their own. Consequently, any significant increase in the enrollment of Medicare recipients in managed care plans would have the direct result of reducing Medicare DSH payments to Medicare DSH hospitals.

This issue is more important than ever because such a significant increase in the enrollment of Medicare recipients in managed care plans could indeed occur in the very near

future. Among the many proposals that have been made over the years for reducing the growth of federal Medicare spending – and a proposal that has been made yet again this year – is to create incentives to encourage more Medicare beneficiaries to choose to receive their health care benefits through managed care organizations. One of the unquestionable by-products of such an effort, if successful, would be the loss of Medicare DSH revenue for hospitals. Because urban areas are more densely populated, moreover, they are more attractive to managed care organizations, so growth in Medicare managed care participation is likely to affect urban providers far more than providers in other parts of the country. This creates a sense of urgency for developing a better understanding of the impact that such a policy change could have on health care providers – including urban safety-net hospitals.

The federal government is generally aware of this cause-and-effect relationship but has not chosen to act on it when developing and implementing Medicare DSH policy. It has, however, acted on it when developing and implementing Medicare indirect medical education (IME) payment policy. In 1997, Congress mandated that Medicare IME payments be “carved out” of the capitation payments made to participating Medicare+ Choice plans and paid directly to teaching hospitals that qualify for those payments. In so doing, Congress recognized and acknowledged the potential damage that could be caused to teaching hospitals by depriving them of their Medicare IME payments and created a specific law to protect them. Until this law was enacted, managed care organizations generally made no special effort to distinguish between hospitals that had teaching programs and hospitals that did not.

Finally, any change in Medicare reimbursement policy – whether a reduction in Medicare DSH, medical education payments, outliers, DRGs, or others – inevitably has an effect on the recipients of that reimbursement. When changes in Medicare reimbursement policy are proposed, discussed, and debated, the potential implications of those changes should be completely understood by the policy-makers who make those decisions. In this sense, NAUH’s examination of the implications of the loss of Medicare DSH payments on hospitals is intended to symbolize the importance of reaching such a thorough understanding before new policies are implemented.

## **Methodology**

NAUH’s analysis of hospital operating margins and the potential effect of the loss of Medicare DSH payments on hospitals was undertaken through a complex series of assumptions, decisions, steps, and calculations. The following is an overview of NAUH’s methodology.

As the foundation of our statistical analysis, NAUH used several public-use files available from the federal Centers for Medicare & Medicaid Services (CMS), including 1999 Medicare cost reports (PPS XVI), the 1999 Payment Impact File, the 1999 Provider-Specific File, and the 2001 Provider-Specific File. NAUH chose 1999 data because this is the most recent year for which there is reliable data publicly available for a significant number of hospitals. Starting with the 5071 facilities in the 1999 Payment Impact File, NAUH created a subset of data that included hospitals for which there was complete information pertinent to

computing Medicare DSH eligibility, Medicare DSH payments, and financial margins. Hospitals without at least 11 months of data were eliminated, as were 0.5 percent of all remaining hospitals with extremely high or extremely low operating margins. Restricting our analysis to general short-term and children's hospitals, our subset includes 3557 facilities, providing us with a valid representation of hospitals across the U.S.

In 2000, eligibility for Medicare DSH was revised with the enactment of the Benefits Improvement and Protection Act of 2000, commonly known as BIPA. BIPA's primary effect on Medicare DSH was to increase the number of hospitals eligible for Medicare DSH. Specifically, after April 2001, BIPA facilitated Medicare DSH eligibility and payments for many more rural hospitals and small urban hospitals by establishing a lower threshold for Medicare DSH eligibility. In addition, BIPA increased payments to most eligible hospitals – with the primary exception of large urban hospitals.

To attempt to simulate “current day” changes to Medicare DSH, NAUH adjusted 1999 cost report data to simulate the effect that BIPA would have had in 1999 had it been in effect that year. Using the 1999 final rule for inpatient PPS (prospective payment system) and simulating the effect of BIPA, NAUH computed Medicare DSH eligibility and adjustment factors for hospitals and performed our own, independent calculations of the Medicare DSH payments that these hospitals would have received based on estimated DRG payments. In the overwhelming majority of cases for large urban hospitals – the only group that was not affected by BIPA – NAUH's Medicare DSH calculations either were identical to or very close to the amounts that individual hospitals listed on their Medicare cost reports.

In computing financial margins, NAUH subtracted the original cost report Medicare DSH adjustment amount and added our own estimated Medicare DSH adjustment to net patient revenues. This was necessary to enable us to perform our complete financial analysis, including projections of the impact of the loss of Medicare DSH revenue.

With the foundation of our data firmly established, NAUH proceeded along two paths. First, we analyzed hospital operating margins, classifying hospitals in various groups for comparative purposes. Among the groups that we created for this purpose were:

- all rural hospitals
- all urban hospitals
- all rural DSH hospitals
- all urban DSH hospitals
- all large rural DSH hospitals (more than 100 beds)
- all large urban DSH hospitals (more than 100 beds)
- all large rural DSH hospitals that provide at least 15 percent of their services to Medicaid recipients
- all large urban DSH hospitals that provide at least 15 percent of their services to Medicaid recipients

In this report, we present comparisons of hospital operating margins between various groups of rural and urban hospitals.

Next, NAUH used this data to project the impact on hospital operating margins of the loss of significant increments of Medicare DSH revenue. For purposes of this study, we present this analysis in increments of 25 percentage points: that is, we illustrate the impact of the loss of 25 percent, 50 percent, 75 percent, and 100 percent of qualified hospitals' Medicare DSH revenue.

It should be noted that should hospitals lose Medicare DSH revenue as a result of the growth of Medicare managed care, all hospital groups would not suffer this loss equally. Urban areas are more conducive to the growth of managed care because their population is sufficiently large to spread financial risk and sustain the administrative costs of operating a managed care organization. Consequently, different geographic areas would experience different degrees of managed care penetration. NAUH did not attempt to model these differences.

### **The Use of Operating Margin as a Measure of Hospital Financial Performance**

The best way to evaluate a hospital's financial well-being is to look at its operating margin, not its total margin and not just its Medicare margin.

Operating margins are a better reflection of a hospital's true financial health than total margins. Operating margin measures the financial strength (profitability or loss) of a hospital's core activity – patient care – and quantifies how patient revenue contributes to a hospital's overall financial health. If a hospital's operating margin is positive, this means it is making money on its core activity of patient care. If, on the other hand, a hospital's operating margin is negative, this means it is losing money on its core activity of patient care and must rely on non-patient care revenue, such as investments, to compensate for these losses. Hospitals need positive operating margins so they have enough cash to pay their bills, to cover their payroll, and to make equipment purchases, facility renovations, and other capital improvements. If a hospital cannot do these things, it cannot survive. Businesses – hospitals or any other kind – that consistently fail to produce positive operating margins and cover their expenses generally do not remain in business very long.

Total margin, on the other hand, is a measure of hospital performance that incorporates all sources of hospital income, not just patient care income. Among the income reflected in total margin is revenue from investments, parking, gift shops, contributions, and more. As a result, total margin captures performance that, while important, tells much less about the financial health of a hospital's patient care activities. Looking at hospitals' 1999 total margins, for example, is very misleading. Those margins were greatly inflated by the significant gains that many hospitals reaped from investments during the years when the stock market was especially strong, but those gains are nowhere to be found today, when the market is much weaker. In addition to helping mask the growing problem of the effects of under-reimbursement by public payers, the significant revenue generated during the stock market's strong years created an over-reliance among hospitals on revenue from sources beyond their control. Now that this revenue is gone, many hospitals are suffering greatly.

Consequently, hospital total margins from 1999 paint a highly unrealistic picture of the industry's true financial health today.

NAUH also does not address the question of hospitals' Medicare margins. In recent years, some studies of hospital financial health have focused solely on hospital Medicare margins. Using Medicare margins as a proxy for financial health is inappropriate and could lead to flawed public policy. Any single payer's margin, judged alone, is insufficient to describe the overall financial condition of a hospital. Different hospitals have different payer mixes, and each payer within that mix has its own margin. Ultimately, it is the combination of each payer's proportional contribution to a hospital's operating margin, not any single payer's operating margin, that determines that hospital's financial health. Some hospitals could, in theory, have adequate Medicare margins yet have such poor margins from their other payers that they could be on the verge of closing. Because one of Medicare's objectives is to ensure access to care for Medicare beneficiaries, focusing solely on hospitals' Medicare margins is especially inappropriate and short-sighted when evaluating the effectiveness of health care reimbursement and especially, the adequacy of Medicare reimbursement in general and Medicare DSH payments in particular.

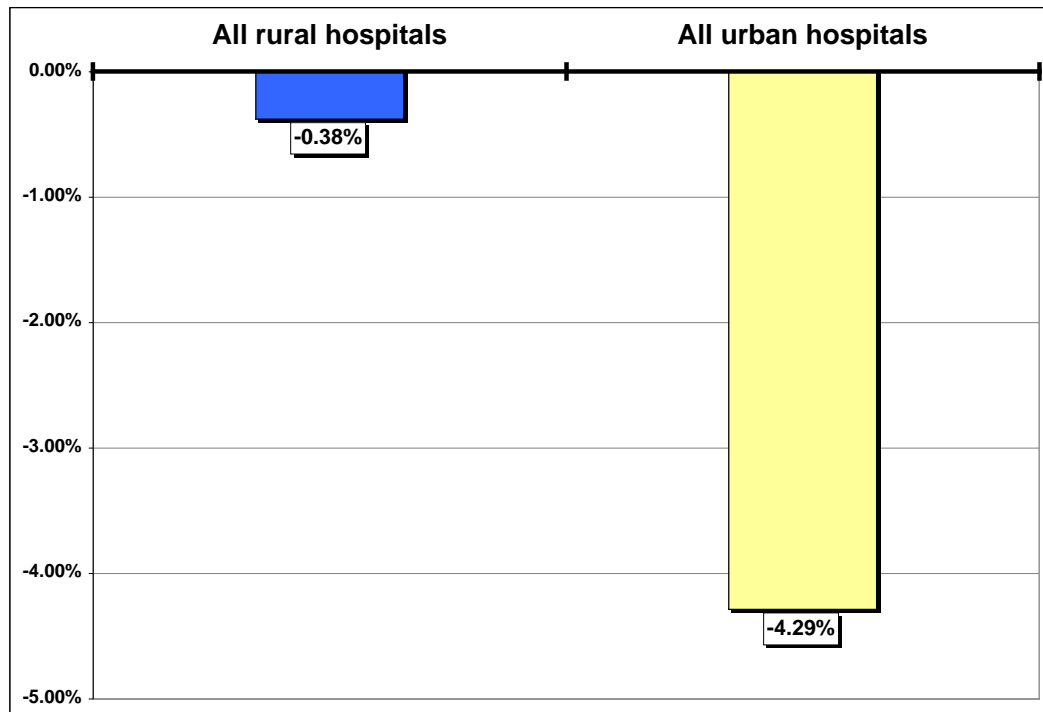
Despite these concerns, NAUH found that when evaluating hospital financial health and performance according to the measures used in this study, results based on total margin reflect the same relationship among groups of hospitals as results based on operating margin. Samples of this research, using total margin, can be found in Appendix B of this report.

## **IV. Our Research**

### **The Current Environment**

NAUH's primary interest in this study is to examine the potential effect of the loss of Medicare DSH revenue on different types of hospitals. Before looking at those effects, however, it is useful to compare the financial health of different types of hospitals in today's environment. A useful frame of reference for this comparison is hospital operating margins. Overall, urban and rural hospitals have significantly different operating margins.

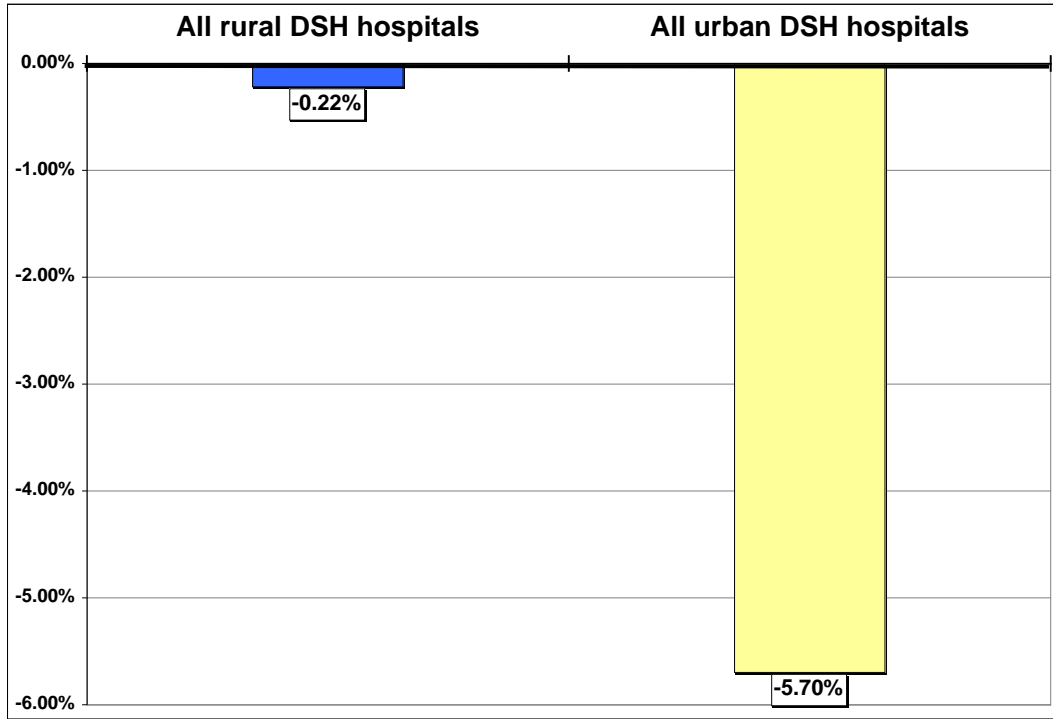
**Figure One: Operating Margin – Urban and Rural Hospitals**



As this chart illustrates, neither rural nor urban hospitals earn enough patient revenue to cover their patient care costs. Urban hospitals, however, face a much greater challenge: their operating margins are more than 11 times lower than those of rural hospitals.

Urban and rural hospitals that qualify for Medicare DSH also have significantly different operating margins.

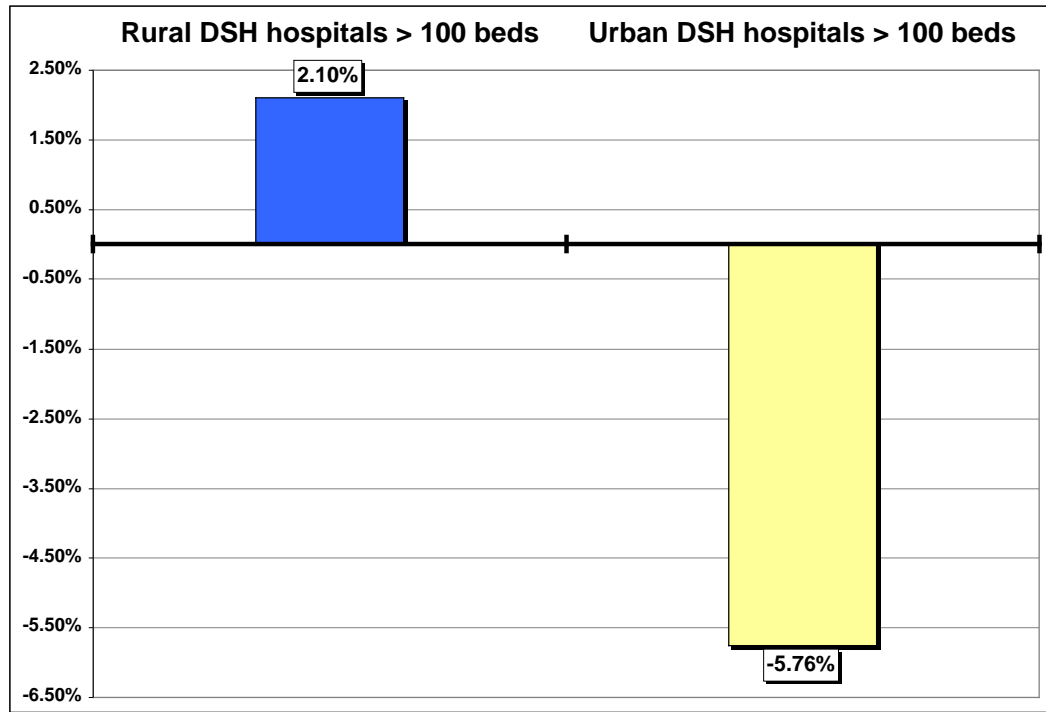
**Figure Two: Operating Margin – Urban and Rural Medicare DSH Hospitals**



As this exhibit shows, the operating margins of urban DSH hospitals are 25 times lower than those of rural DSH hospitals.

Large urban and rural hospitals – hospitals with more than 100 beds – that qualify for Medicare DSH also have significantly different operating margins.

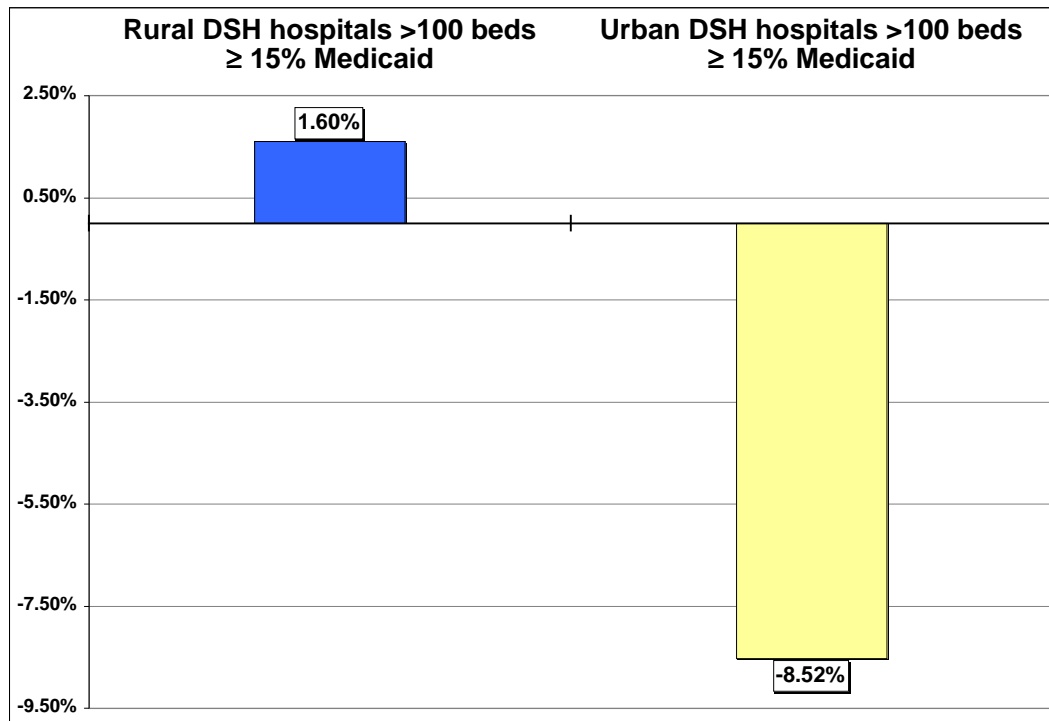
**Figure Three: Operating Margin – Large Urban and Rural Medicare DSH Hospitals**



As this chart demonstrates, the disparity between the operating margins of DSH-eligible hospitals widens as the hospitals grow larger. Large rural DSH hospitals – those with more than 100 beds – have an average operating margin that is positive: +2.10 percent. This means that these hospitals actually are covering their patient care expenses with patient revenue, with some money to spare. Large urban DSH hospitals, on the other hand – those with more than 100 beds – experience much lower operating margins. Large urban DSH hospitals have operating margins nearly eight percentage points lower than large rural DSH hospitals. Clearly, the performance of large urban DSH hospitals suffers both on its own and especially in comparison to large rural DSH hospitals.

Large urban DSH hospitals with more than 100 beds that provide at least 15 percent of their services to Medicaid recipients also differ in performance from large rural DSH hospitals with more than 100 beds that also provide at least 15 percent of their services to Medicaid recipients.

**Figure Four: Operating Margin – Large Urban and Rural Medicare DSH Hospitals  $\geq$  15% Medicaid**

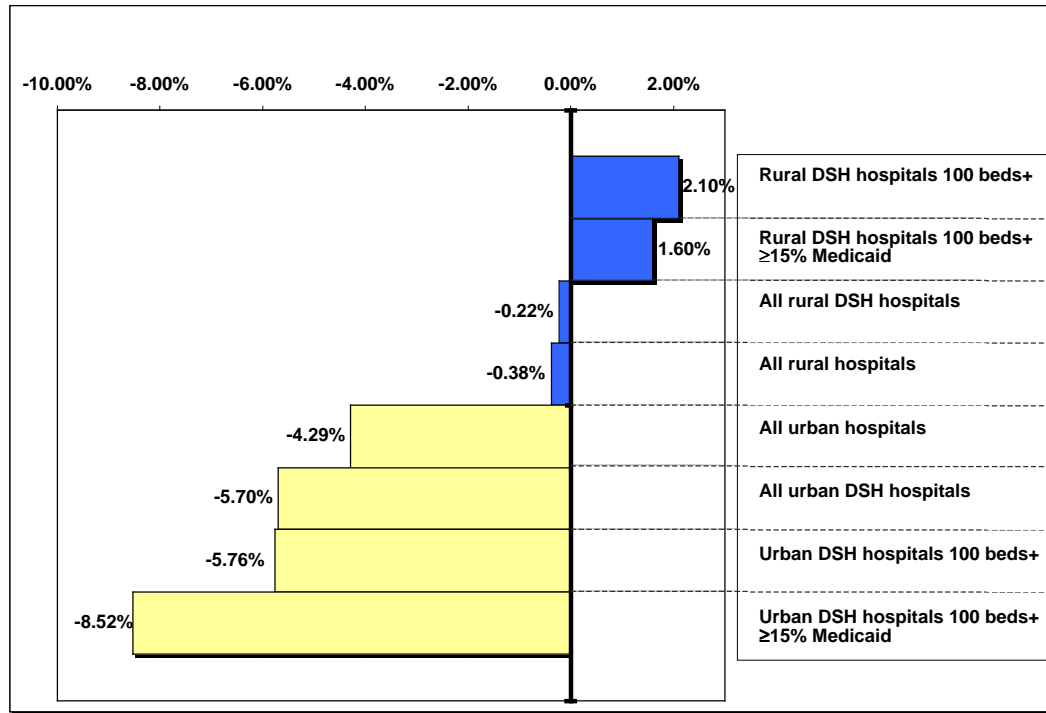


As this exhibit illustrates, rural DSH hospitals with more than 100 beds that also provide at least 15 percent of their services to Medicaid recipients have a positive operating margin – +1.6 percent – despite the high proportion of low-income patients they serve. This means that their patient revenue exceeds their costs and suggests financial stability. Urban DSH hospitals with more than 100 beds that also provide at least 15 percent of their services to Medicaid recipients have a dangerously negative operating margin of -8.52 percent – 10 percentage points worse than comparable rural hospitals. Hospitals with operating margins of -8.52 percent cannot expect to survive for long.

It also is interesting to note that the difference in operating margins between large rural DSH hospitals and large rural DSH hospitals that provide more than 15 percent of their services to Medicaid recipients – +2.1 percent and +1.6 percent, respectively – is not great: those margins fall just one-half of one percentage point for hospitals that provide a significant portion of their services to Medicaid recipients. The difference in operating margins between large urban DSH hospitals and large urban DSH hospitals that provide more than 15 percent of their services to Medicaid recipients – -5.76 percent and -8.52 percent, respectively – is much greater: the latter see their margins fall more than two-and-a-half percentage points. Large urban DSH hospitals that provide at least 15 percent of their services to Medicaid recipients have lower operating margins than any other group of hospitals analyzed in this study.

The following graph summarizes and contrasts the average operating margins of groups of different kinds of hospitals.

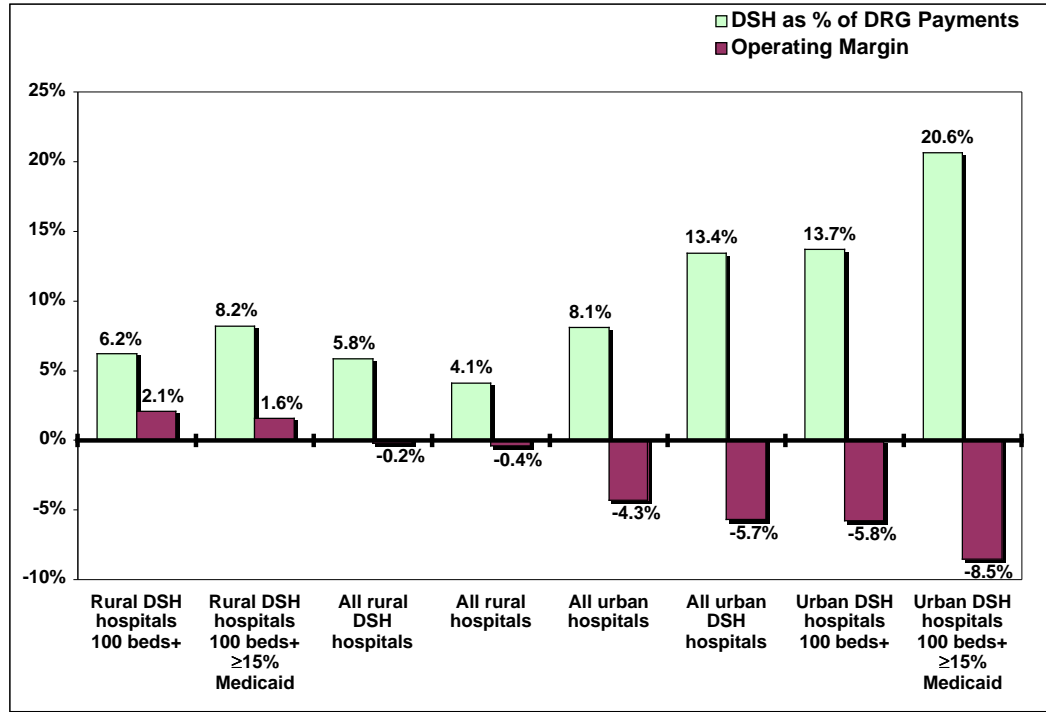
**Figure Five: Operating Margin – Comparison**



As this exhibit illustrates, all rural hospitals examined in this study had better operating margins than all urban hospitals examined in this study. The poorest-performing group of rural hospitals has significantly better operating margins than the best-performing group of urban hospitals. In fact, the operating margins of the best-performing group of urban hospitals – all urban hospitals – are about four percentage points worse than the operating margins of the worst-performing group of rural hospitals.

Is there a relationship between a hospital’s operating margin and its dependence on Medicare DSH revenue? The following chart brings together these two measures for different groups of hospitals.

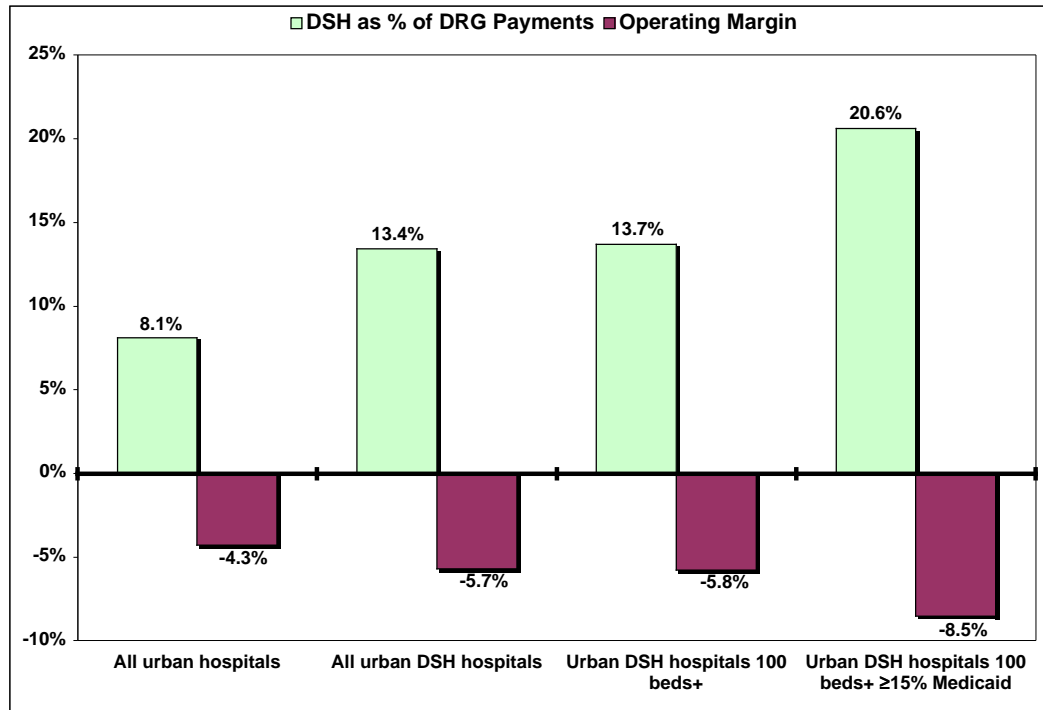
**Figure Six: Summary – Operating Margin and Medicare DSH as a Percentage of Medicare DRG Payments**



This chart offers a broad overview of the relationship between Medicare DSH revenue and hospital financial performance and how this relationship varies among different types of urban and rural hospitals. The following charts isolate these relationships and comparisons in different combinations.

The next chart summarizes the operating margins of urban hospitals and the amount of Medicare DSH revenue that they receive as a percentage of their overall Medicare DRG revenue.

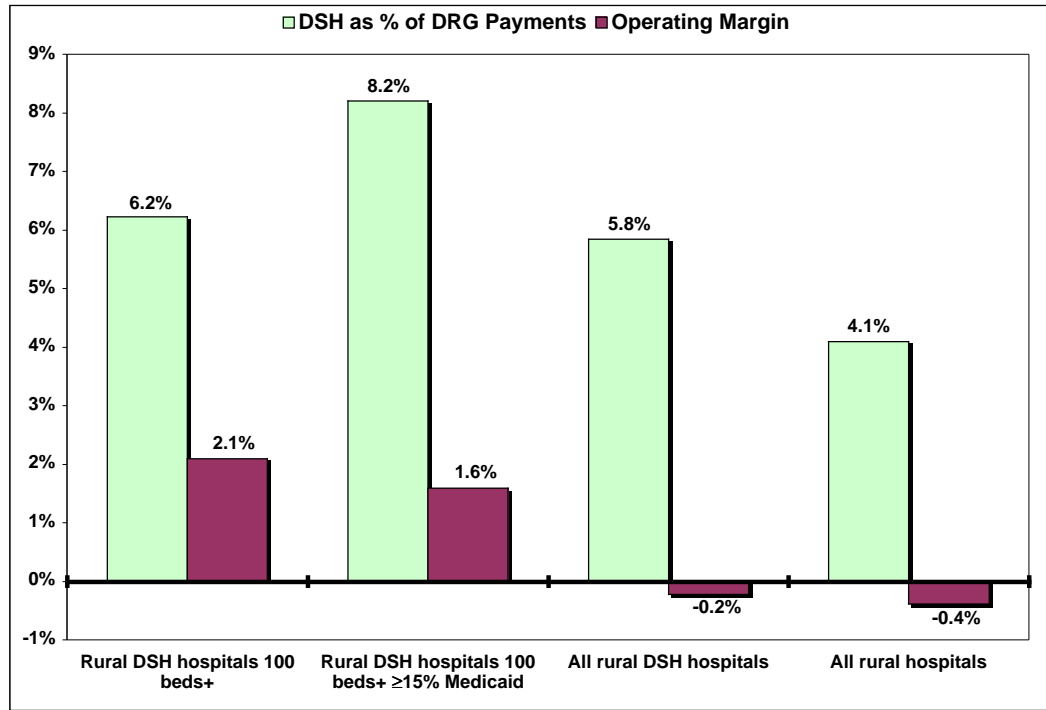
**Figure Seven: Operating Margin and Medicare DSH as a Percentage of Medicare DRG Payments – Urban Hospitals**



This chart begins to show the possible relationship between an urban hospital’s operating margin and its dependence on Medicare DSH revenue. In general, it appears that the more important Medicare DSH revenue is to an urban hospital in relation to its overall Medicare DRG revenue, the lower the hospital’s operating margin is likely to be. This could be interpreted as meaning that while current Medicare DSH payments appear to be going to the hospitals that are suffering the most financially, the current level of those payments does not achieve the program’s objective of protecting the financial viability of hospitals to ensure that they can continue serving Medicare recipients in communities with high proportions of low-income residents. This chart also demonstrates that large urban DSH hospitals that provide at least 15 percent of their services to Medicaid recipients perform worse financially than all other types of urban hospitals.

Next, we look at a similar comparison among different types of rural hospitals.

**Figure Eight: Operating Margin and Medicare DSH as a Percentage of Medicare DRG Payments – Rural Hospitals**



This chart shows an opposite effect on hospital performance for Medicare DSH revenue: the more Medicare DSH revenue that rural hospitals receive as a percentage of their overall Medicare revenue, the more their operating margins improve. In the process, those operating margins cross an important threshold: from negative to positive, which is where all hospitals need to be to ensure their long-term survival.

### Summary of Key Findings

- Large urban hospitals that provide at least 15 percent of their services to Medicaid recipients perform worse financially, as a group, than any other group of hospitals.
- Of the different types of hospitals analyzed in this study, the operating margins of all groups of rural hospitals are significantly higher than the operating margins of all groups of comparable urban hospitals.
- The operating margins of rural hospitals as a whole are 11 times greater than those of urban hospitals.
- The operating margins of rural DSH hospitals are 25 times greater than those of urban DSH hospitals.
- The operating margins of large rural DSH hospitals – those with more than 100 beds – are eight percentage points higher than those of comparable urban hospitals.

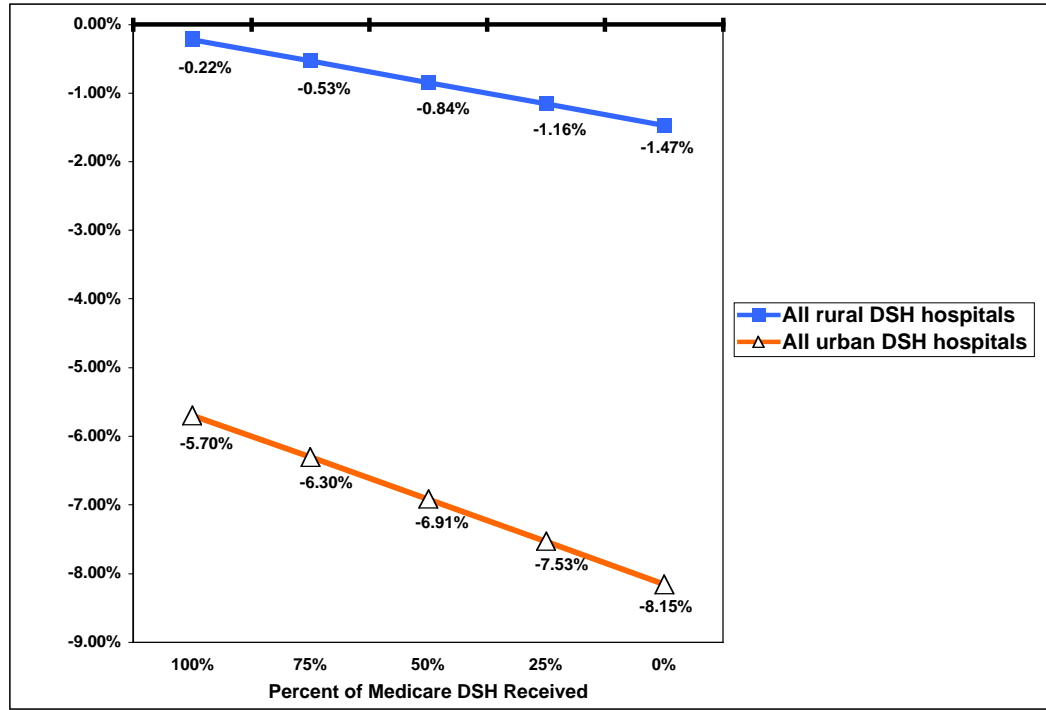
- The operating margins of large rural DSH hospitals that provide at least 15 percent of their services to Medicaid recipients are 10 percentage points higher than those of comparable urban hospitals.
- The more Medicare DSH revenue that urban hospitals receive as a proportion of their overall Medicare revenue, the *lower* their operating margins are likely to be.
- The more Medicare DSH revenue that rural hospitals receive as a proportion of their overall Medicare revenue, the *higher* their operating margins are likely to be.
- Medicare DSH revenue is twice as important, as a percentage of overall Medicare revenue, to urban hospitals as a whole than it is to rural hospitals – yet urban hospitals’ operating margins are four percentage points lower than those of rural hospitals.
- Medicare DSH revenue is more than twice as important, as a percentage of overall Medicare revenue, to large urban DSH hospitals than it is to large rural DSH hospitals – yet large urban DSH hospitals’ operating margins are nearly eight percentage points lower than those of comparable rural DSH hospitals.
- Medicare DSH revenue is more than twice as important, as a percentage of overall Medicare revenue, to large urban DSH hospitals that provide more than 15 percent of their services to Medicaid recipients than it is to comparable rural hospitals – yet the operating margins of those urban DSH hospitals are 10 percentage points lower than their rural counterparts.

## **The Effects of Reducing Medicare DSH Payments to Hospitals**

As described previously, NAUH was interested in learning whether incremental reductions in Medicare DSH payments, regardless of their cause, might have a similar effect on different types of hospitals. This is an important question to ask for two reasons: first, because there have been numerous efforts over the years to reduce Medicare DSH payments; and second, because any increase in the use of managed care in Medicare would result in reduced Medicare DSH payments for qualified hospitals. If such reductions were to take place, would all types of hospitals suffer equally, or at least somewhat similarly, if they lost significant proportions of their Medicare DSH payments? Or would some types of hospitals suffer more if such losses were to occur? Would the differences in performance between different types of hospitals remain the same or would they shrink or grow?

This first chart shows a comparison between what could happen to all rural DSH hospitals and all urban DSH hospitals if they were to lose Medicare DSH payments in increments of 25 percent.

**Figure Nine: Operating Margins – Projected with Medicare DSH Reductions – Urban and Rural DSH Hospitals**



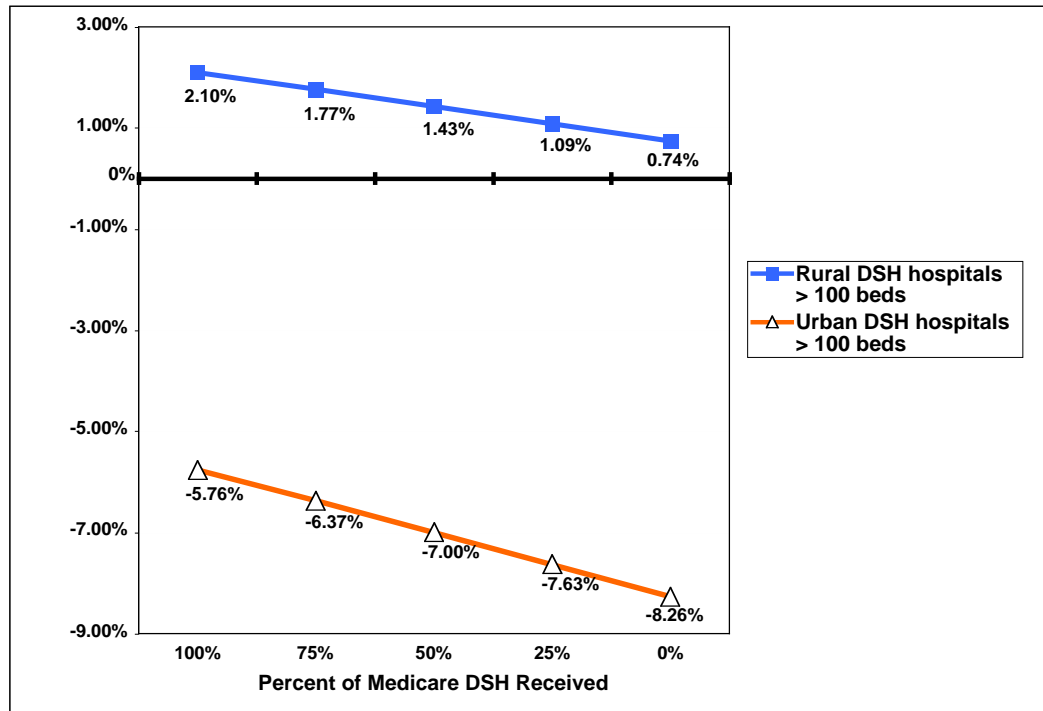
This analysis begins with one clear observation: rural DSH hospitals start from a much healthier financial position than urban DSH hospitals. While their operating margins, as a group, are negative, they are only barely so. Urban DSH hospitals, on the other hand, already have significantly negative operating margins and already are in a state of financial distress. Taking Medicare DSH money away from these groups would hurt both groups, but it would certainly hurt urban DSH hospitals more.

As this chart shows, if rural DSH hospitals lost all of their Medicare DSH revenue, their operating margins would fall only 1.25 percentage points. If urban hospitals lost all of their Medicare DSH revenue, however, their operating margins would fall nearly twice as much: nearly 2.5 percentage points. The erosion of the operating margins of all urban DSH hospitals would be precipitous, with the difference in operating margin between the two groups growing from 5.48 percentage points to 6.68 percentage points.

In fact, depriving all rural DSH hospitals of *all* of their Medicare DSH money would still leave them with operating margins 4.5 percentage points higher than all urban DSH hospitals are today, with no additional Medicare DSH losses.

The following chart contrasts how incremental losses of Medicare DSH revenue could affect large urban and rural DSH hospitals – hospitals with more than 100 beds.

**Figure Ten: Operating Margins – Projected with Medicare DSH Reductions – Large Urban and Rural Medicare DSH Hospitals**



This analysis, too, begins with a clear observation: rural DSH hospitals with more than 100 beds start from a much healthier financial position than urban DSH hospitals. Today, they have positive operating margins, which suggests financial stability. Urban DSH hospitals with more than 100 beds, on the other hand, already have significantly negative operating margins and already are in a state of financial distress. Taking money away from these groups would hurt both groups, but it would certainly hurt large urban DSH hospitals more.

As this chart shows, if large rural DSH hospitals lost all of their Medicare DSH revenue, their operating margins would fall only 1.36 percentage points – and they would still remain positive. If large urban hospitals lost all of their Medicare DSH revenue, however, their operating margins would fall 2.5 percentage points – nearly twice as much. The erosion of the operating margins of large urban DSH hospitals would be precipitous, with the difference in operating margins between the two groups growing from 7.86 to nine percentage points.

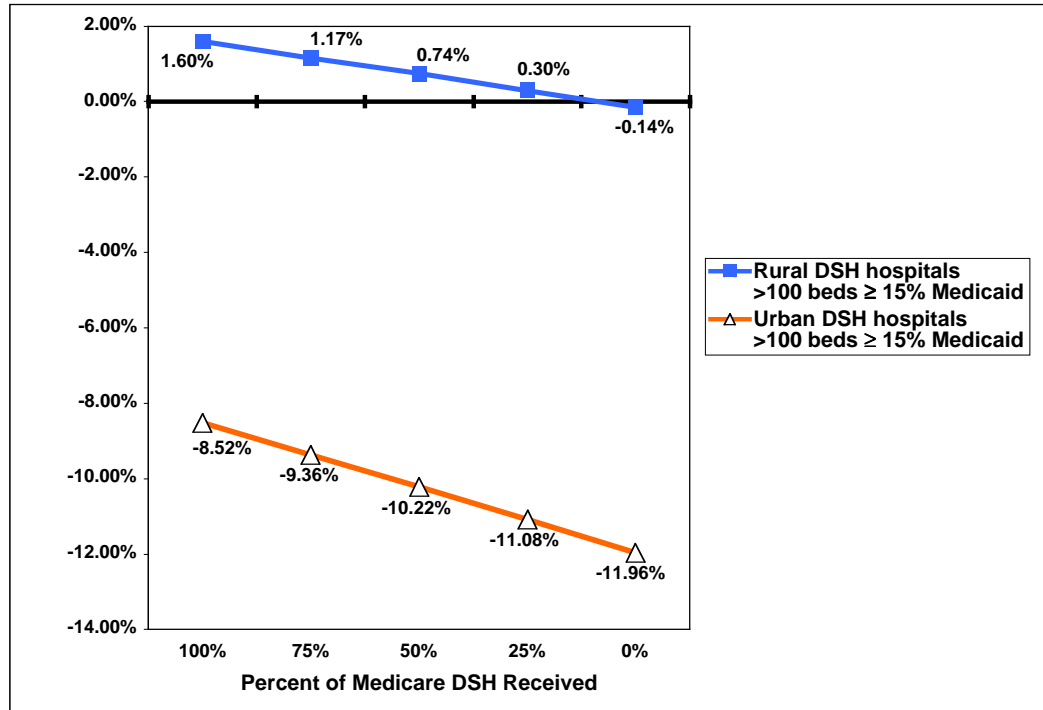
In fact, depriving all large rural DSH hospitals of *all* of their Medicare DSH money would still leave them with operating margins 6.5 percentage points higher than all large urban DSH hospitals are today, with no additional Medicare DSH losses.

Even if large rural DSH hospitals lost all of their Medicare DSH money, they would still have positive operating margins. Even with all of their current Medicare DSH money, large urban DSH hospitals already have dangerously negative operating margins, and if they

lost some or all of their Medicare DSH money, their operating margins would fall even lower.

The following chart contrasts how incremental losses of Medicare DSH revenue would affect large urban and rural DSH hospitals – hospitals with more than 100 beds – that also provide at least 15 percent of their overall services to Medicaid recipients.

**Figure Eleven: Operating Margins – Projected with Medicare DSH Reductions Large Urban and Rural Medicare DSH Hospitals ≥ 15% Medicaid**

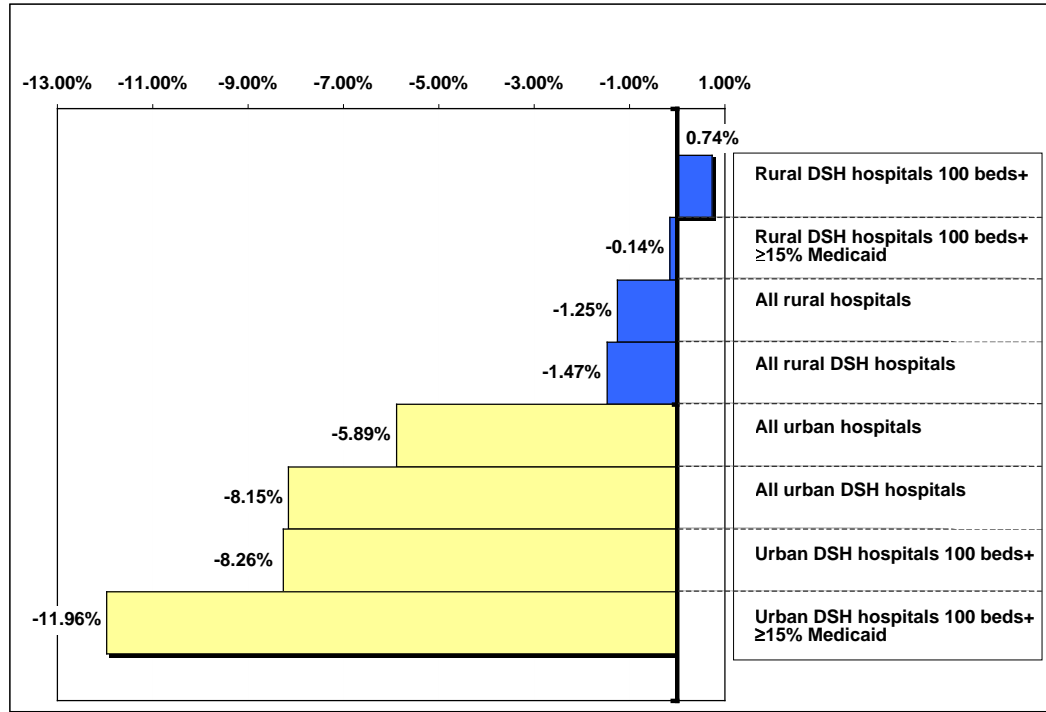


As this exhibit shows, if large rural DSH hospitals that provide at least 15 percent of their services to Medicaid recipients lost all of their Medicare DSH revenue, their operating margins would fall only 1.46 percentage points. If similar urban DSH hospitals lost all of their Medicare DSH revenue, however, their operating margins would fall 3.44 percentage points – nearly two-and-a-half times more. The disparity in operating margins between the two groups would grow, from 10.12 to 11.82 percentage points.

In fact, depriving all of these high Medicaid volume, large rural Medicare DSH hospitals of *all* of their Medicare DSH revenue would still leave them with operating margins 8.38 percentage points higher than comparable urban hospitals have today, with no additional Medicare DSH losses.

The following figure summarizes the impact of the loss of Medicare DSH revenue on each different group of hospitals. It shows what each group’s operating margin would be if the hospitals lost 100 percent of their Medicare DSH revenue.

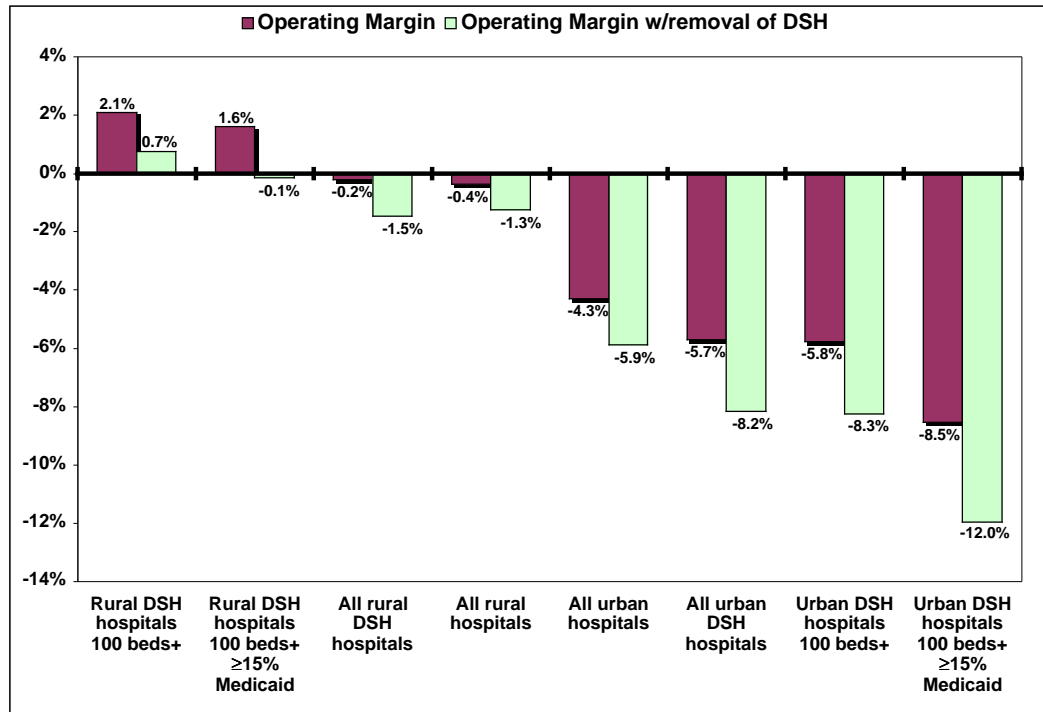
**Figure Twelve: Operating Margin – Summary Comparison  
With Removal of 100% of Medicare DSH**



As this summary chart illustrates, cutting or eliminating Medicare DSH payments always hurts urban hospitals more than rural hospitals; this result holds true regardless of the type of hospitals compared. Large urban DSH hospitals would suffer the most, and among such hospitals, those that provide more than 15 percent of their services to Medicaid recipients would see their operating margins fall so low – to -11.96 percent – that it is unlikely that they would be able to remain financially viable.

This final summary figure illustrates the decline in operating margins that could be expected if hospitals lost all of their Medicare DSH revenue. It shows their operating margins before they lose any Medicare DSH revenue and after they lose 100 percent of that revenue.

**Figure Thirteen: Summary – Operating Margin Before and After the Loss of 100% of Medicare DSH Revenue**



As this chart illustrates, all hospitals would suffer a decline in their operating margins if they lost all of their Medicare DSH revenue. Rural hospitals, however, would see their operating margins fall from positive levels to lower positive levels or from barely negative levels to slightly more than barely negative levels. Urban hospitals, on the other hand, all already have dangerously negative operating margins, and if they lost 100 percent of their Medicare DSH revenue, those operating margins would, in some cases, fall so low that many of these hospitals probably would not survive.

### Summary of Key Findings

- As noted in the previous section, all rural hospital groups currently enjoy higher operating margins than comparable urban hospital groups analyzed in this study.
- The reduction or elimination of Medicare DSH payments always increases the gap in operating margins between comparable urban and rural hospitals.
  - If urban and rural DSH hospitals lost all of their Medicare DSH revenue, the operating margins of the urban DSH hospitals would fall twice as much.
  - If large urban and rural DSH hospitals lost all of their Medicare DSH revenue, the operating margins of the large urban DSH hospitals would fall nearly twice as much.
  - If large urban and rural DSH hospitals that provide more than 15 percent of their services to Medicaid recipients lost all of their Medicare DSH

revenue, the operating margins of the urban group would fall nearly two-and-a-half times as much.

- Because large urban hospitals – especially those that treat significant proportions of Medicaid recipients – already have such low operating margins, the elimination of Medicare DSH probably would result in many of them closing their doors.

## **V. Why Large Urban Hospitals Matter**

Large urban safety-net hospitals are a vital part of the American health care system and worth special attention as state and federal officials consider, plan, develop, and make the public policies that shape that health care system. First and foremost, they are the primary providers of care to large, densely populated urban communities – communities with ethnically and racially diverse populations, large numbers of seniors and frail elderly residents, large numbers of working-class residents, and many low-income, uninsured, and underinsured residents who have few choices about where they can turn for health care. These hospitals have the resources and the experience to deal with the wide range of health care challenges that such richly varied communities can pose.

Large urban hospitals typically constitute the health care heart of their communities. Often, they are the only provider to which most of their elderly and low-income neighbors can turn for care. To the extent that individual practitioners – general practitioners and specialists – set up clinics and offices in these communities, they do so solely because of the presence of the hospital. More often than not, they have been recruited to the community by that hospital, which often finances and sometimes even owns their practices. Without the hospital’s intervention, most of these caregivers would be no more likely to set up practices in these low-income urban areas than they would in geographically isolated rural areas.

In addition, large urban hospitals are almost always the economic heart of their communities. Inevitably their community’s largest employer – often, its only major employer – they provide work to thousands of working-class and middle-class people, many of whom live within minutes of their doors. Their presence also helps support numerous community-based businesses – everything from restaurants and convenience stores to small, supply- and service-oriented businesses that have arisen specifically to serve the hospital and its employees.

But large urban hospitals are more than resources for the communities that surround them; they also are resources for entire cities, entire regions, and, indirectly, the entire country. They typically offer a wide variety of services, many of which are unavailable elsewhere – services such as neonatal intensive care, transplants, special care for people with brain and spinal injuries, burn centers, trauma care, and much more. Frequently, they host one or more federally designated “center of excellence.” When helicopters take to the air to transport critically ill and injured patients, their destination is almost always a large urban safety-net hospital. These hospitals are where the sickest people go, where people turn when their community hospitals cannot help them and when their own physicians tell them that they must go elsewhere for specialized care.

Large urban safety-net hospitals are one of the most important parts of the medical education system in the U.S. today. They are where new doctors train today so they can work tomorrow in urban, suburban, and rural communities and hospitals throughout the country. These hospitals are the site of leading-edge medical research and important clinical trials – and the places where the advances that such research leads to are first used, and where doctors from all over the country come to train in their use.

The American health care system consists of many parts – medical schools, physicians and other health care professionals, hospitals and clinics, insurers, and more. All play a vital role in ensuring that this system works, and that it is there when sick people need it. Large urban safety-net hospitals play a critical role in this system: they matter, they make an enormous contribution to the health and well-being of their communities and those beyond their communities. When they close, they leave entire communities without appropriate access to care – and the economic problems that led to their demise simply follow their former patients to whatever hospital they next turn to for care. For these reasons, large urban safety-net hospitals merit special attention in the analysis, development, and implementation of the government health care policies that play such a significant role in determining their futures.

## **VI. Conclusion**

Last year, NAUH’s research demonstrated that urban hospitals are in worse financial condition – and often, in much worse financial condition – than non-urban hospitals. This year we have produced new data, based on publicly available Medicare cost reports and other data, that confirms this conclusion. This data also demonstrates that large urban safety-net hospitals, and especially large urban safety-net hospitals that provide more than 15 percent of their services to Medicaid recipients, are in especially precarious financial condition.

In recent years there have been numerous proposals – some of them successful – to reduce Medicare DSH payments to qualified hospitals. For this reason, NAUH used the same publicly available data from Medicare cost reports and other public sources to project the impact of possible future losses of Medicare DSH revenue on Medicare DSH hospital financial performance. This analysis found that urban DSH hospitals would suffer more from projected losses of Medicare DSH revenue than rural DSH hospitals and that large urban hospitals, and large urban hospitals that provide more than 15 percent of their services to Medicaid recipients, in particular, would suffer the greatest losses – losses so great that they could jeopardize the ability of these hospitals to remain open. For this reason, the Medicare DSH program should be preserved and protected and qualified hospitals should continue to receive Medicare DSH payments directly from the federal government – and every effort should be made to ensure that those payments achieve their goal of ensuring the financial viability of hospitals that the federal government needs to remain open to care for Medicare recipients.

This analysis is important because policy-makers in Washington so frequently raise the possibility of reducing federal spending for Medicare DSH. Medicare DSH also is vulnerable if plans move forward to encourage more Medicare recipients to receive their health care benefits through managed care because as managed care enrollment increases, Medicare DSH payments decline and managed care organizations do not compensate providers for their loss of Medicare DSH payments.

It is especially troubling, from NAUH's perspective, that whenever federal policy-makers talk about reducing Medicare DSH, the public debate that ensues is always couched in terms of the budgetary benefits of such a reduction. Instead of focusing solely on how much money the federal government might save, this debate also needs to address the impact that such a policy change might have on the hospitals that receive Medicare DSH payments and on the elderly, low-income, uninsured, and underinsured residents of the communities that those hospitals serve. In truth, this policy debate has never included the kind of detailed, in-depth analysis of this impact that NAUH has produced in this study. This analysis should receive careful consideration in future debates about Medicare DSH.

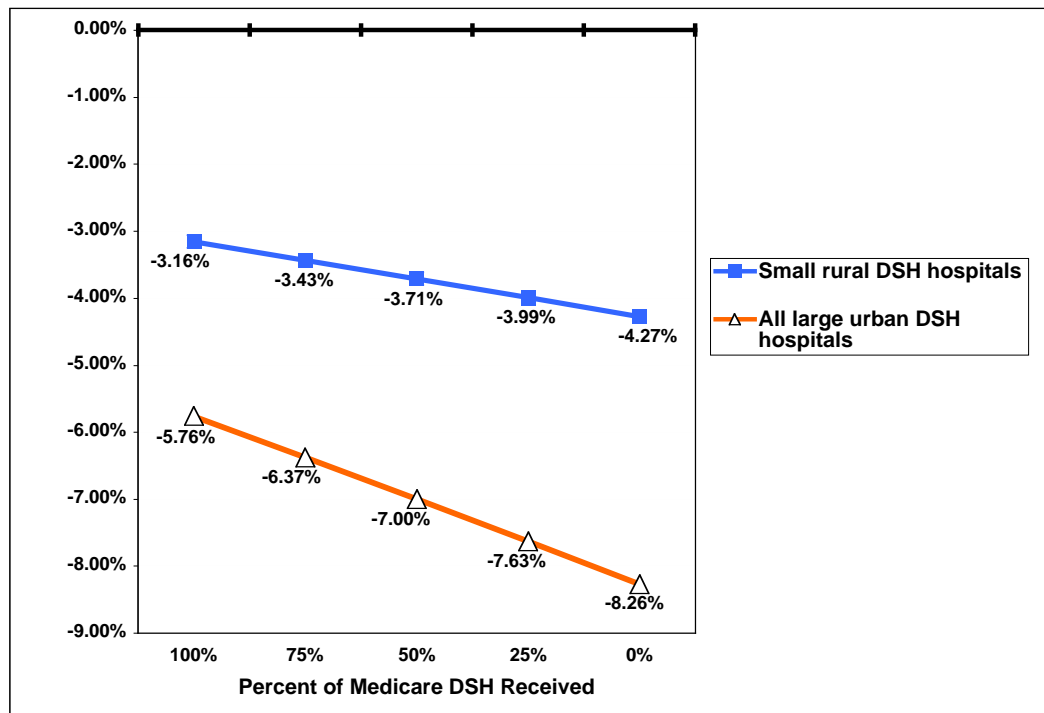
On one level, this study demonstrates the importance of taking a much more deliberate approach when talking about reducing, eliminating, or fundamentally altering the Medicare DSH program in the future. On another level, however, this study also speaks to the need for a more analytic approach whenever policy-makers talk about major changes in Medicare reimbursement policy. Changes in DRG rates or medical education payments, for example, could have a similar impact on Medicare DSH hospitals in general, and on urban DSH and large urban DSH hospitals in particular. Other program revisions could have other unintended effects, and the possibility of such effects should be examined carefully, in detail and in depth, before such policy changes are implemented and not after they have done their damage.

The potential for such damage, NAUH's study suggests, is considerable. Today, urban safety-net hospitals – and especially, large urban safety-net hospitals and large urban safety-net hospitals that provide at least 15 percent of their services to Medicaid recipients – are extremely vulnerable to changes in Medicare policy. As this study demonstrates, these hospitals already are in poor financial condition today – and in far worse condition than comparable rural hospitals. In many respects, in fact, they are every bit as vulnerable as the elderly, low-income, uninsured, and underinsured people who depend on them for care. Their Medicare DSH payments should not be cut; in fact, they should be increased. Many of these hospitals already rely too heavily on non-operating income to survive, and with the decline of the stock market, such income is more scarce than ever. Consequently, it will be much harder in the future for these hospitals to get by on operating revenue alone. For this reason, serious consideration should be given to increasing, not decreasing, their Medicare DSH payments. At the very least, special attention should be paid to the situation and needs of urban safety-net hospitals when policy-makers discuss changing federal Medicare reimbursement policy. They deserve that special attention.

## Appendix A: Small Rural Hospitals

A great deal of concern has been expressed in recent years about the plight of small rural DSH hospitals – hospitals with fewer than 100 beds. The following chart shows how small rural DSH hospitals would fare if they suffered incremental losses of Medicare DSH revenue and contrasts what would happen to them with what would happen to large urban DSH hospitals (with more than 100 beds).

**Figure Fourteen: Operating Margins – Projected with Medicare DSH Reductions for Large Urban Medicare DSH Hospitals and Small Rural Medicare DSH Hospitals**



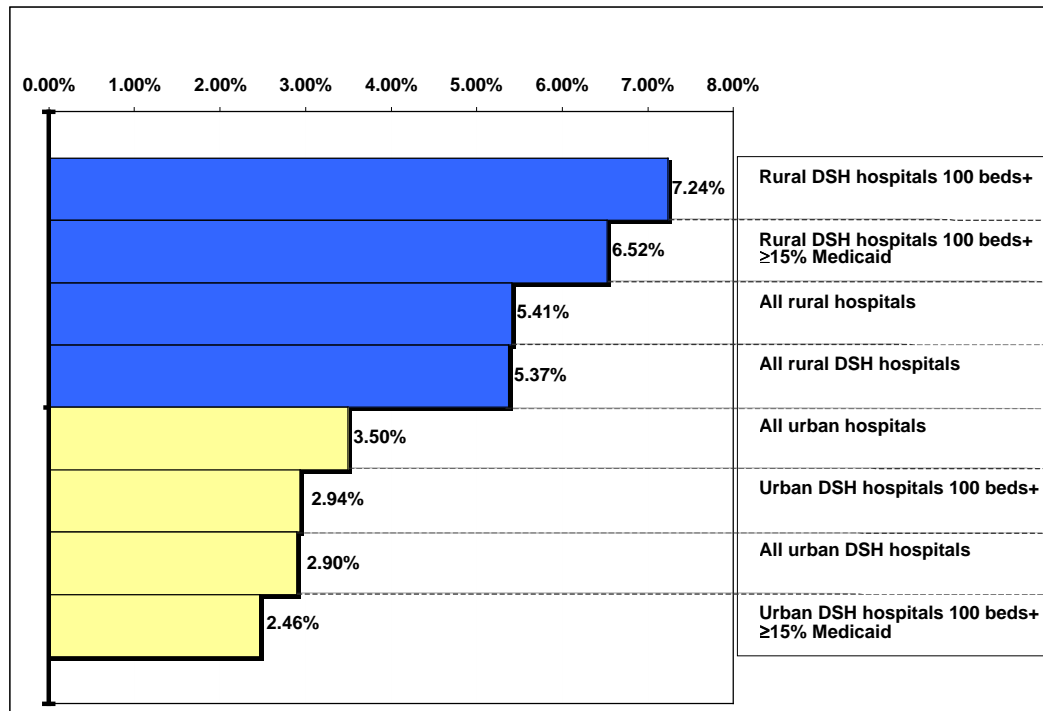
As this chart illustrates, concern for the survival of small rural DSH hospitals is entirely justified. Small rural hospitals start with poor operating margins, and if they lost a significant proportion of the Medicare DSH revenue, they clearly would suffer. Large urban hospitals, however, start with much worse margins, and if they lost a significant portion of their Medicare DSH revenue, they would be in even greater financial trouble. While small rural DSH hospitals would see their operating margins fall by slightly more than one percentage point if they lost all of their Medicare DSH revenue, large urban DSH hospitals would see their operating margins fall by well over two percentage points – more than twice the loss of small rural DSH hospitals. Consequently, while concern for the plight of small rural DSH hospitals is justified, this group does not appear to merit more attention than urban DSH hospitals because the dangers that small rural DSH hospitals face are no greater than those of urban DSH hospitals.

## Appendix B: Selected Measures of Performance Using Hospital Total Margins

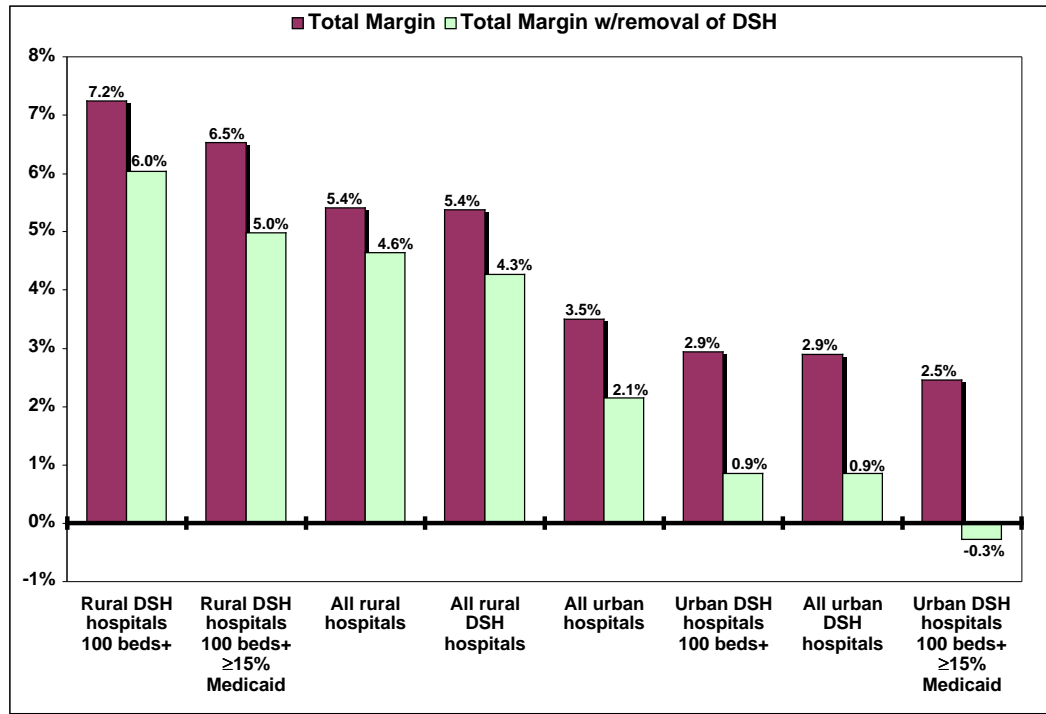
As noted in section three of this report, NAUH chose to use hospital operating margin rather than total margin to measure hospital financial performance because operating margin is a better, truer measure of that performance. As described in section three of this study, operating margin measures the financial strength (profitability or loss) of a hospital's core activity – patient care – and quantifies how patient care revenue contributes to a hospital's overall financial health. Total margin, on the other hand, is a measure of hospital performance that incorporates all sources of hospital income – investments, parking, gift shops, contributions, and more – not just patient care income. As a result, total margin captures performance that, while important, tells much less about the financial health of a hospital's patient care activities.

During the course of our research, however, NAUH periodically measured hospital financial performance based on total margin. In general, we found that outcomes based on total margin generally mirrored outcomes based on operating margin. The following charts, based on the same data described in section three, illustrate this point.

**Figure Fifteen: Total Margin – Summary Comparison**



**Figure Sixteen: Summary – Total Margin Before and After the Loss of 100% of Medicare DSH Revenue**



## The National Association of Urban Hospitals

*The Operating Margins of Urban Safety-Net Hospitals and the Projected Impact of Reductions in Medicare DSH on Those Operating Margins* was prepared by the National Association of Urban Hospitals (NAUH). NAUH advocates for adequate recognition and financing of private, urban safety-net hospitals that serve America's needy urban communities. These urban safety-net hospitals differ from other hospitals in a number of key ways: they serve communities whose residents are much older and poorer; they are far more reliant on Medicare and Medicaid for revenue; they provide far more uncompensated care; and unlike public safety-net hospitals, they have no statutory entitlement to local or state funds to underwrite their costs. NAUH's role is to ensure that when federal officials make policy decisions, they understand the implications of those decisions for these distinctive urban safety-net hospitals. NAUH pursues its mission through a combination of vigorous, informed advocacy, data-driven positions, and an energetic membership with a clear stake in the outcome of public policy debates.

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*For further information about the National Association of Urban Hospitals or the information presented in this report, or to request additional copies of this report, please contact Ellen Kugler, executive director, at 703-444-0989 or visit our web site at [www.nauh.org](http://www.nauh.org).*