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PROBLEMS IN DETERMINING A HOSPITAL'S LEVEL OF UNCOMPENSATED CARE

FINAL REPORT

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PROBLEMS IN DETERMINING A HOSPITAL'S LEVEL OF UNCOMPENSATED CARE

EXECUTIVE SUMMARY

The overall goal of this report is to evaluate the definitional and measurement problems encountered in determining the level of uncompensated care provided by a hospital. This evaluation will be used in future efforts to develop better measures of uncompensated care provided by hospitals. Such measures will allow policymakers to better evaluate the effects of reimbursement policy on hospital finances. They could also be used in standards for tax exemption or disproportionate share payments.

SIGNIFICANCE

For a number of closely-related reasons, hospital provision of uncompensated care has received renewed attention in recent years. First, public and private cost containment efforts raise concerns that uncompensated care will become a luxury that many hospitals cannot afford. Second, with about 35 million Americans uninsured, the potential level of uncompensated care in the nation may be higher than in previous periods. Third, some hospitals provide disproportionate shares of uncompensated care. Further increases in uncompensated care could threaten their financial viability. Fourth, because of the factors described above, policymakers have begun to consider more explicit methods of financing uncompensated care. If uncompensated care is to be explicitly financed, it must be explicitly measured. Finally, studies showing wide variations in uncompensated care between not-for-profit hospitals have

sparked debate about whether a not-for-profit hospital's tax-exempt status should be contingent upon the amount of uncompensated care it provides.

POTENTIAL USES FOR UNCOMPENSATED CARE DATA

The preceding suggests three major uses for data on uncompensated care. First, by monitoring trends in uncompensated care across hospitals and over time, policymakers can better evaluate the effects of public policy on hospital finances and the access to care by the uninsured, the major beneficiary of uncompensated care. Second, a hospital's level of uncompensated care could be used as one of the main criteria in determining whether a hospital qualifies for disproportionate share payments at either the state or federal level. Third, one of the main criteria in a revised standard for tax-exempt status for not-for-profit hospitals could be the amount of uncompensated care provided by the hospital. In this report, we do not evaluate the appropriateness of each of the potential uses for data on uncompensated care. Instead, we focus on appropriately defining and measuring hospital uncompensated care. However, the appropriate definition for uncompensated care cannot be determined independently of its potential use, since a definition which is appropriate for one use may not be precise enough for other uses.

UNCOMPENSATED HOSPITAL CARE: BACKGROUND

Although the purpose of this report is not to fully evaluate current provision of uncompensated care in hospitals, but rather to develop methods for defining and measuring uncompensated care, we briefly describe recent trends in uncompensated care to put the latter task in context. Both uncompensated care costs and the percentage of uninsured vary widely across states,

with the two variables being strongly correlated. A 1 percentage point increase in the uninsured nonelderly population is associated with a .4 percentage point increase in uncompensated care. Looked at over time, uncompensated care costs rose from 5.1 percent of total hospital costs in 1980 to a high of 6.4 percent in 1986, before declining to 6.0 percent in 1989. This trend has several important implications. First, since about 13.6 percent of all Americans were uninsured in 1989, the uninsured appear to receive less than a proportionate share of overall hospital spending. Second, the overall increase in uncompensated care as a fraction of total hospital costs is perhaps smaller than might be predicted from the outcry about the growth of the uninsured. Third, although the percentage of total costs accounted for by uncompensated care has only risen from 5.1 percent to 6.0 percent, the absolute dollar value has increased three-fold since 1980, rising from $3.9 billion to $11.1 billion in 1989. Fourth, uncompensated care data do not yet reflect the effects of the current recession. Finally, trends in Medicaid spending help explain why uncompensated care rose as a fraction of total hospital costs during the early and mid-1980s, before falling somewhat between 1986 and 1989. In general, state Medicaid programs tightened eligibility requirements and benefit levels during the earlier period and expanded eligibility and benefits in the latter period.

The distribution of uncompensated care across hospitals is quite uneven, with'a few hospitals bearing a disproportionate share of the burden. The distribution suggests that policies aimed at helping the uninsured and reducing the burden of uncompensated care can and should be targeted at individual hospitals, rather than the hospital industry_ as a whole.

CONCEPTUAL ISSUES

We identify 14 conceptual issues which must be addressed when measuring uncompensated care. These issues are:

1. What do we want to measure?
2. Bad debt vs. charity care: Should bad debt be included as uncompensated care?
3. Costs vs. charges: How should uncompensated care be measured?
4. What type of cost should be used?
5. What cost-to-charge ratio should be used to deflate charges to costs?
6. Should uncompensated care be measured net of state and local government subsidies?
7. Should uncompensated care be measured net of donations?
8. Should Medicaid shortfalls be included in a measure of uncompensated care?
9. Should Medicare shortfalls be included in a measure of uncompensated care?
10. Should contractual allowances to private insurers be included as uncompensated care?
11. Should other "free" care be counted as uncompensated care?
12. Is the relevant measure of uncompensated care the dollar amount or the fraction of hospital costs?
13. Should hospitals be required to report separate entries for uncompensated care provided in inpatient, outpatient, and emergency room settings?

14. Will hospitals respond to changed reporting requirements for uncompensated care?

INTERVIEWS WITH HOSPITAL ADMINISTRATORS

To help resolve these issues, we interviewed a number of hospital administrators to determine the practical problems they face in measuring uncompensated care. We asked the administrators what kind of information they currently report and what additional information they could report. The key findings from these interviews are described below.

First, the degree of care used to assess charity care and/or bad debt levels can differ widely between hospitals, especially in those states which do not make explicit requirements on hospitals to "prove" the eligibility of those cases they report as charity. Second, there is some difference in the ability of the hospitals to maintain accurate records to distinguish between bad debt and charity care; while some hospitals boast fairly sophisticated accounting software, most did not. Third, the presence of state guidelines for determining charity care amounts appears to improve the care and time taken to produce these figures.

Discussion with these hospitals indicate that some caution must be taken when examining the available data on charity care and bad debt. A number of economists advocate using only uncompensated care (charity care plus bad debt) when comparing hospitals because of the numerous problems associated with distinguishing between the two separate measures. It appears that it may be possible to examine charity care and bad debt separately in those states where guidance by state agencies is significant. More caution must be used when

examining data from those states where reporting is not closely monitored by the state.

EXISTING DATA SETS

We examined existing data sets on uncompensated care to evaluate whether the data overcome the definitional and measurement problems we previously identified. We first examined two national data sets that include hospital finances, Medicare Cost Reports and the American Hospital Association (AHA) Annual Survey of Hospitals. Because the Medicare Cost Reports lump together contractual allowances to payers with bad debt and charity care, the source does not provide useful information on uncompensated care. However, because the Cost Reports contain valuable information which could be used to convert information on uncompensated care charges to costs, this instrument could be expanded to include uncompensated care data. For current and past information, the AHA Annual Surveys are a more promising data source, since hospitals voluntarily report the amounts of bad debt and charity care they supply. These data have important limitations, however. Hospitals voluntarily choose to respond to the survey; while overall response rates are high, response rates fall dramatically for revenue and cost questions, particularly for for-profit hospitals. In addition, the financial sections of the Annual Surveys are considered confidential and are not released to the public.

State planning and Medicaid agencies appear to offer a rich set of data on uncompensated care. Many of these agencies collect detailed information on uncompensated care. To determine whether state data collection systems appropriately measure uncompensated care, we evaluated the quality of data on uncompensated care collected by state hospital agencies in Florida and

Tennessee. We examined whether bad debt and charity care are consistently reported, if most hospitals answer relevant sections of the cost report, and whether bad debt and charity care levels are comparable across periods of time.

Judging from the two states' data, it appears possible to collect fairly good data on uncompensated care at the individual hospital level. A hospital's total uncompensated care generally moves predictably from year to year with few unexpected fluctuations. Distinguishing between bad debt and charity care appears more problematic, with many hospitals apparently changing their definitions, and therefore, the mix of bad debt and charity care during the period. Overall, the relative share of charity care rose during the period, possibly because the states clarified the distinction between of charity care and bad debt. Missing values were relatively uncommon.

INTERVIEWS WITH OFFICIALS IN STATE DATA COLLECTION AGENCIES

At least 22 states collect information on hospital uncompensated care. To get an idea of the problems associated with collecting uncompensated care data, we talked with officials in a number of state data collection agencies. We asked the officials to describe 1) what types of data are collected, 2) how the state defines different components of uncompensated care, 3) whether the state audits reported values, and 4) how the data is used by the state. The last issue is important because hospitals will have greater incentives to keep detailed records on uncompensated care if the information is used to determine hospital reimbursement or tax exemption. Reported levels of charity care and bad debt may also be affected if state policies distinguish between the two.

Hospital data on uncompensated care are used for a variety of purposes in the states we surveyed. The data are barely used in internal research in Illinois. In other states, the data are publicly disseminated (Wisconsin) or used as part of state rate review proceedings (Arizona and Vermont). In some states, hospital reimbursement rates are tied directly to uncompensated care levels, either through Medicaid disproportionate share payments (Arizona, Florida, California, and Tennessee) or as part of a broader mechanism based primarily on uncompensated care (Maryland and Massachusetts). The uncompensated care data may also be used in Certificate of Need proceedings or disputes over hospital tax exemption.

The definition of charity care varies somewhat between states. Some states provide a general definition for charity care, while other states instruct hospitals to base the definition on a patient's income. States using the latter instructions vary in the choice of threshold, with different states setting the threshold at 100, 150, or 200 percent of the poverty level; some states allow families with income above the threshold to qualify for partial charity care according to a sliding scale. These differences may complicate interstate comparisons which focus solely upon charity care.

States which distinguish between charity care and bad debt for reimbursement purposes, such as Florida and Massachusetts, define charity care more precisely and require more documentation than other states. Maryland, where reimbursement depends almost as much on uncompensated care as it does in Massachusetts, does not distinguish between the different types of uncompensated care, however.

Except in Illinois, officials in state agencies express confidence in the aggregate uncompensated care data they collect. They generally express

less confidence in the distinction between bad debt and charity care. Charity care appears to be increasing as a percentage of uncompensated care, particularly in states where reimbursement policies distinguish between charity care and bad debt or hospitals have faced challenges to tax-exempt status. This suggests that hospitals respond naturally when they face greater incentives to distinguish between types of uncompensated care.

RECOMMENDATIONS

Based on our interviews with hospital administrators and officials in state data collection agencies, as well as our analysis of Florida and Tennessee data on uncompensated care, we recommend that the issues previously introduced be resolved in the following way.

1. What do we want to measure?

Recommendation 1: We recommend that measures of uncompensated care should attempt to embody two basic principles:
1) Uncompensated care should represent care provided to people who cannot afford to pay for that care. 2) The hospital's actual contribution to uncompensated care should be measured.

2. Bad debt vs. charity care: Should bad debt be included as uncompensated care?

Recommendation 2.a. If HCFA begins to collect data on uncompensated care, we recommend that hospitals should report separate figures for bad debt and charity care. For the moment, however, we recommend that HCFA and other policymakers use the broader definition of uncompensated care (bad debt plus

charity care) when monitoring trends in uncompensated care or as the basis for tax exemption or disproportionate share status.

Recommendation 2.b. If the broader definition of uncompensated care is used in standards for tax exemption or disproportionate share payments, the standards should recognize that some portion of uncompensated care does go to patients who can afford to pay, but don't (the traditional definition of bad debt). Hospitals should have to go beyond this level in order to qualify for tax-exempt or disproportionate share status.

Recommendation 2.c. We recommend that clear instructions be given to hospitals for distinguishing between bad debt and charity care. Precise instructions are especially important if tax exemption or disproportionate share payments are based only on charity care.

Recommendation 2.d. Given our recommendation that overall uncompensated care levels be used if standards for tax-exempt status or disproportionate share payments are adopted, we do not recommend that hospitals be required to submit documentation for their distinctions between bad debt and charity care. Instead, hospitals should maintain written copies of a formal uncompensated care policy and be prepared to show that uncompensated care is actually provided to patients. Greater documentation is probably required if policies are based on charity care alone. Even so, requirements for documenting charity care should be carefully weighed against the costs of documentation.

Recommendation 2.e. If policies are based solely on charity care, we recommend that hospitals not be required to classify patients as "charity care" patients according to a strict time schedule. Thus, hospitals would not be required to classify a patient as charity care upon admission or before beginning collection effects, as long as the hospital has an established policy for classifying patients.

3. Costs vs. charges: How should uncompensated care be measured?

We recommend that hospitals should report uncompensated care on the basis of charges. For policy and research purposes, however, the charges should be converted to uncompensated care costs.

4. What type of cost should be used?

We recommend that uncompensated care costs be evaluated on the basis of the hospital's average costs. This implies that uncompensated care charges should be converted to costs by multiplying by the hospital's overall cost-to-charge ratio.

5. What cost-to-charge ratios should be used to deflate charges to costs?

We recommend that a relatively simple cost-to-charge ratio, such as the hospital's total expenses divided by its gross patient revenues, be used to convert charges to uncompensated care costs.

6. Should uncompensated care be measured net of state and local government subsidies?

We recommend that uncompensated care should **not** be reported net of state (excluding Medicaid) and local subsidies. Such subsidies should also be clearly reported, so that researchers and policymakers wishing to calculate uncompensated care net of subsidies can easily do so.

7. Should uncompensated care be measured net of donations?

We recommend that uncompensated care should **not** be measured net of donations.

8. Should Medicaid shortfalls be included in a measure of uncompensated care?

We recommend that Medicaid shortfalls should **not** be reported by hospitals as uncompensated care. Medicaid shortfalls raise two issues closely related to uncompensated care. First, is there any difference between uncompensated care (payments less than costs by private patients) and Medicaid shortfalls (payments less than costs by Medicaid patients)? Second, if Medicaid shortfalls are similar to uncompensated care, how are the shortfalls to be measured? The first issue is conceptual, while the second issue involves the empirical task of determining whether Medicaid payments are adequate to cover the costs of treating Medicaid patients. Conceptually, we believe that Medicaid shortfalls are relevant for standards for tax exemptions and disproportionate share payments which attempt to measure a hospital's contribution towards patients who cannot afford to pay for that care. However, we believe that further research on how cost-to-charge ratios vary by procedure and by payer is necessary before Medicaid payment adequacy and,

therefore, Medicaid shortfalls can confidently be computed. We recommend that such research should be performed. In the meantime, hospitals should report Medicaid gross revenue and Medicaid deductions from revenue.

9. Should Medicare shortfalls be included in a measure of uncompensated care?

We recommend that Medicare shortfalls should not be reported by hospitals as uncompensated care. Medicare shortfalls raise two issues closely related to uncompensated care. First, is there any difference between uncompensated care (payments less than costs by private patients) and Medicare shortfalls (payments less than costs by Medicare patients)? Second, if Medicare shortfalls are similar to uncompensated care, how are the shortfalls to be measured? The first issue is conceptual, while the second issue involves the empirical task of determining whether Medicare payments are adequate to cover the costs of treating Medicare patients. Conceptually, we believe that Medicare shortfalls are relevant for standards for tax exemptions and disproportionate share payments which attempt to measure a hospital's contribution towards patients who cannot afford to pay for that care. However, we believe that further research on how cost-to-charge ratios vary by procedure and by payer is necessary before Medicare payment adequacy and, therefore, Medicare shortfalls can confidently be computed. We recommend that such research should be performed. In the meantime, hospitals should report Medicare gross revenue and Medicare deductions from revenue.

10. Should contractual allowances to Private insurers be included as uncompensated care?

We recommend that contractual allowances between hospitals and private insurers not be included as uncompensated care.

11. Should other "free" care be counted as uncompensated care?

We recommend that "free" care not be included in information reported by hospitals as uncompensated care.

12. Is the relevant measure of uncompensated care the dollar amount or the fraction of hospital costs?

We recommend that policy decisions consider both absolute levels of uncompensated care and the ratio of uncompensated care costs to total hospital costs.

13. Should hospitals be reouired to report separate entries for uncompensated care provided in inpatient, outpatient, and emergency room settings?

At this time, we do not believe that hospitals consistently distinguish between uncompensated care provided in inpatient, outpatient, and emergency room settings. Therefore, if HCFA chooses to require hospitals to report uncompensated care levels, we recommend that it initially require reporting of total uncompensated care provided by the hospital. Hospitals might be required to classify uncompensated care by inpatient and outpatient settings at a later date.

14. Will hospitals respond to changed reporting reauirements for uncompensated care?

We expect that hospitals will respond to changed reporting requirements for uncompensated care. In particular, reported levels of charity care are likely to rise and bad debt fall if standards for tax exemption or disproportionate share payments are based on charity care alone.

CHAPTER 1. INTRODUCTION AND BACKGROUND

The overall goal of this report is to evaluate the definitional and measurement problems encountered in determining the level of uncompensated care provided by a hospital. This evaluation will be used in future efforts to develop better measures of uncompensated care provided by hospitals. Such measures will allow policymakers to better evaluate the effects of reimbursement policy on hospital finances.

Our approach is both conceptual and applied. Initially, we focus on how uncompensated care can best be measured in principle. We do so by discussing the issues involved in defining uncompensated care and discussing shortcomings in previous studies of uncompensated care. We then turn to the practical problems of applying our concepts to currently available hospital data sets and hospital accounting systems. Interviews with hospital administrators and state hospital regulators who collect uncompensated care data allow us to pinpoint many of the practical problems of measuring uncompensated care. In addition, we evaluate the quality and consistency of data on uncompensated care collected by state hospital agencies in Florida and Tennessee. Finally, we synthesize our conceptual and applied analyses to recommend what type of and how data on uncompensated care should be collected.

SIGNIFICANCE

For a number of closely-related reasons, hospital provision of uncompensated care has received renewed attention in recent years. First, the rapidly rising cost of hospital care has spawned a number of cost containment programs by private and public health care insurers. In the past, hospitals often

implicitly financed uncompensated care by charging insured patients prices above costs, a practice hospital administrators call "cost-shifting". Now, with private and public insurers increasingly objecting to paying for treatment their enrollees do not consume and competition between hospitals intensifying, implicit cost-shifting is becoming more difficult. Moreover, if cost containment efforts control reimbursement levels and hospitals are unable to lower costs, hospital operating margins will decrease. Thus, cost containment raises concerns that uncompensated care will become a luxury that many hospitals cannot afford.

Second, recent studies show that about 35 million Americans are uninsured (U.S. Bureau of the Census, 1991b). In addition, because of budget cuts and cost containment, hospitals maintain that in many states Medicaid and even Medicare reimbursements do not fully cover beneficiary costs. As a result, the potential level of uncompensated care in the nation may be higher than in previous periods.

Third, previous studies of uncompensated care show wide variation across hospitals in the percentage of uncompensated care provided by hospitals (Sloan, Valvona, and Mullner, 1986 and GAO, 1990). Many urban public hospitals and not-for-profit teaching hospitals provide disproportionately high shares of total uncompensated care. Combined with current trends in cost containment and the growth of the uninsured, this finding raises concerns about the financial viability of some hospitals providing disproportionate shares of uncompensated care.

Fourth, because of the factors described above, policymakers at both the state and federal level have begun to consider more explicit methods of financing uncompensated care. Within the last 15 years, eleven states have

adopted hospital revenue funds to spread the costs of uncompensated care more evenly across hospitals (Brown and Dallek, 1990). These programs vary widely in structure: some distribute money from uncompensated care pools directly to hospitals providing uncompensated care, while others use taxes on net revenues to finance the state's share of its Medicaid program, thereby allowing increases in eligilibity which indirectly reduce uncompensated care burdens.

At the federal level, Medicare's prospective payment system (PPS) now pays a disproportionate share adjustment to hospitals treating especially large percentages of Medicaid and low income Medicare beneficiaries. The original and still official rationale for the disproportionate share adjustment is that hospitals incur higher costs when they treat low income patients. However, recent research suggests that the payment mechanism exaggerates the effect of disproportionate share on cost (Prospective Payment Assessment Commission, 1991a). Some policymakers justify continuing the adjustment by arguing that the adjustment indirectly finances care to Medicaid and uninsured patients since disproportionate share hospitals will be less able to finance uncompensated care because they have fewer high-paying privately insured patients (Burke, 1990). Despite this justification, the disproportionate share adjustment is not directly related to the amount of uncompensated care provided by a hospital. Although uncompensated care is undoubtedly correlated with the number of Medicaid patients a hospital treats, the correlation may not be perfect because of differences in Medicaid eligibility and benefit levels between states. Thus, variation in Medicare disproportionate share payments only explains 19 percent of the variance in the fraction of uncompensated care costs across hospitals (Ashby, 1991b). Moreover, areas with broad Medicaid eligibility requirements and/or generous benefit levels will have.

relatively low amounts of uncompensated care, but receive high disproportionate share payments.

Disproportionate share payments in state Medicaid programs are based on hospital provision of uncompensated care. States can use two criteria to assign disproportionate status to hospitals (Commerce Clearing House, Inc., 1988). Under the first criteria, hospitals must have either

1) a Medicaid inpatient utilization rate at least one standard deviation above the mean rate in the state; or

2) a low income utilization rate exceeding 25 percent, where the low income utilization rate is defined as the sum of Medicaid inpatient revenue divided by total inpatient revenue and charity care inpatient charges divided by total inpatient charges.

The second criteria may be set by the state, as long as it includes all hospitals satisfying (1) or (2). For example, a state's criteria might define low income utilization to include all uncompensated care, instead of just charity care.

In both state and federal programs, if uncompensated care is to be explicitly financed, it must be explicitly measured. Therefore, it is worth investigating whether more appropriate measures of uncompensated care can be developed.

Finally, studies showing wide variations in uncompensated care between not-for-profit hospitals have sparked debate about whether a not-for-profit hospital's tax-esempt status should be contingent upon the amount of uncompensated care it provides. Under current IRS rules, a not-for-profit hospital's tax exemption is only tenuously related to its provision of uncompensated care. A recent GAO report concludes, "If the Congress wishes to encourage

nonprofit hospitals to provide charity care to the poor and underserved and other community services, it should consider revising the criteria for tax exemption. Criteria for exemption could be directly linked to a certain level of (1) care provided to Medicaid patients, (2) free care provided to the poor, or (3) efforts to improve the health status of underserved portions of the community (GAO, 1990)." Separate bills were introduced in the House of Representatives in both 1990 and 1991 which would set explicit standards on the amount of uncompensated care a hospital had to provide in order to qualify for tax exemption (United State House of Representatives, 1990; Kuchler, 1992).

POTENTIAL USES FOR UNCOMPENSATED CARE DATA

The preceding discussion suggests three major uses for data on uncompensated care. First, by monitoring trends in uncompensated care across hospitals and over time, policymakers can better evaluate the effects of public policy on hospital finances and access to care by the uninsured, the major beneficiary of uncompensated care. Second, a hospital's level of uncompensated care could be used as one of the main criteria in determining whether a hospital qualifies for disproportionate share payments at either the state or federal level. Third, one of the main criteria in a revised standard for tax-exempt status for not-for-profit hospitals could be the amount of uncompensated care provided by the hospital.

In this report, we will <u>not</u> evaluate the appropriateness of each of the potential uses for data on uncompensated care. For example, we will not discuss whether or how much uncompensated care should be required of hospitals receiving tax-exempt status, nor will we set criteria on uncompensated care

for disproportionate share hospitals. Instead, we will focus on appropriately defining and measuring hospital uncompensated care. However, the appropriate definition for uncompensated care cannot be determined independently of its potential use, since a definition which is appropriate for one use may not be precise enough for other uses. For example, if the main purpose for requiring hospitals to report uncompensated care levels is to monitor hospital financial conditions and access to care by the uninsured, policymakers can probably rely on each hospital's own definition of uncompensated care. Although such definitions may vary between hospitals, they change slowly over time' and should yield a fairly accurate picture of aggregate hospital finances. On the other hand, policymakers will have to carefully define uniform standards for measuring uncompensated care if reimbursement or tax levels are to be based on uncompensated care levels. Consequently, we will often refer to possible uses of the data as we discuss appropriate measures for uncompensated care.

OVERVIEW OF THE REPORT

Our report is organized in the following way. In the rest of this chapter, we provide a brief background on the provision of uncompensated care in the United States. We discuss recent trends in uncompensated care across states and hospitals and highlight the relationship between uncompensated care and payments by public and private insurers. By necessity, this discussion uses traditional measures of uncompensated care by way of introduction, some

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'This statement assumes that uncompensated care data are only used for monitoring purposes. As discussed in Chapters 3 and 4, if uncompensated care data are used to determine reimbursement or tax-exempt status, hospitals may quickly change how they define uncompensated care.

of the conceptual issues concerning measuring uncompensated care are briefly described.

The conceptual issues are discussed in much greater detail in Chapter 2, which also examines how previous researchers have resolved the issues. The conceptual analysis and literature review produce preliminary conclusions on some of the issues; they raise questions about other issues which must be resolved by examining the practical ability of hospitals and policymakers to collect data on uncompensated care. We provide this examination in Chapters 3 and 4.

Chapter 3 examines how hospitals collect data on uncompensated care through their patient accounts. We interviewed a number of hospital administrators to'determine the practical problems they face in measuring uncompensated care. We asked the administrators what kind of information on uncompensated care they currently report and what additional information they could report.

In Chapter 4, we examine the type of uncompensated care data currently collected by regulatory and hospital financial agencies and hospital organizations. While Medicare cost reports contain virtually no information on uncompensated care, many state hospital agencies require fairly detailed reporting on uncompensated care. We evaluate the extent to which these systems overcome the definitional issues we identified in Chapter 2 and whether the systems can be adopted on a nationwide basis. We formally evaluate the quality and consistency of data on uncompensated care collected by state hospital agencies in Florida and Tennessee. To gain further information on state data collection, we interviewed officials who oversee collection of uncompensated care data in a number of other states. We asked them how

they defined uncompensated care, how closely they checked the accuracy of the information reported by hospitals, and how they used the information. The latter question is important since the way the state uses the data may affect hospitals' incentives for providing both uncompensated care and accurate information about the amount of care. For example, if a state sets hospital reimbursement rates partially on the basis of the amount of uncompensated care a hospital provides, hospitals will have greater incentives to provide such care. We also evaluate the data on uncompensated care collected by the American Hospital Association in its annual survey of hospitals.

Bolstered by the practical lessons of Chapters 3 and 4, in Chapter 5 we return to the conceptual problems and make recommendations.

UNCOMPENSATED HOSPITAL CARE: BACKGROUND

In this section, we briefly discuss recent trends in uncompensated care in the United States. Although the purpose of this report is not to fully evaluate current provision of uncompensated care in hospitals, but rather to develop methods for defining and measuring uncompensated care, a little background on uncompensated care will help put the latter task in context. Of special importance for both policy and measurement issues are the relationships between uncompensated care and (1) access to care by the uninsured, (2) Medicaid, and (3) cost-shifting.

We start by discussing some of the limitations of the traditional method for determining a hospital's level of uncompensated care. These limitations will be discussed in greater detail in Chapter 2.

A. A Few Cautions

Hospital data on uncompensated care have important limitations which must be considered when comparing uncompensated care totals between hospitals, across states, and over time. First, most hospitals do not explicitly aggregate data on the charges and costs incurred by uninsured patients. However, most hospitals report totals for uncompensated care, which equals bad debt plus charity care. Traditionally, bad debt has been defined as the charges owed by patients who can afford to pay but don't, while charity care has been defined as the charges owed by patients who cannot afford to pay. In principal, bad debt is a normal cost of doing business and probably should be considered separately from charity care, which is more clearly a contribution from the hospital to patients. In actual practice, however, the distinction between bad debt and charity care varies considerably between hospitals. Two hospitals with the same amount of uncompensated care may report very different mixes of bad debt and charity care, even though there are no obvious reasons for the differences. Much of this variance comes from the uncertain nature of hospital care: it is difficult, particularly in emergency cases, to determine a patient's ability to pay. In addition, hospitals often have little incentive to accurately distinguish between bad debts and charity care. Consequently, most researchers looking at hospital provision of charity care have focused on the broader classification of uncompensated care.

Second, not all uncompensated care is provided to uninsured patients: the classification includes bad debts incurred by insured patients who do not pay their hospital deductibles or coinsurance and charity care provided to insured patients for uncovered care. Studies of individual patient bills in Florida and Indiana suggest that about two-thirds of all uncompensated care is

actually received by uninsured patients, however (Duncan and Kilpatrick, 1987; Saywell, et al., 1989). Duncan and Kilpatrick also estimate that the uninsured paid about 18 percent of their billed charges in Florida in 1985, covering 26 percent of the costs of their treatment. Together, Duncan and Kilpatrick's two estimates suggest that the cost of treating the uninsured was about 91 percent of the cost of uncompensated hospital care in 1985. Consequently, uncompensated hospital care may provide a fairly good approximation to the cost of treating uninsured patients in hospitals.

Third, hospital accounting systems aggregate patient accounts into categories like Medicare, Medicaid, and privately insured revenues on the basis of charges. Deductions from revenue, including bad debt and charity care, are also based on charges. The problem with this method is that no one pays charges any more. In 1990 in Florida, for example, Medicare paid about 46 percent of charges, Medicaid paid 49 percent of charges, and even private insurers paid only 91 percent of actual charges. Moreover, different hospitals charge different markups over cost, making comparisons of uncompensated care revenues between hospitals misleading. A more accurate measure of a hospital's uncompensated care is based on the cost of uncompensated care. This measure can be computed by multiplying uncompensated care revenues by the hospital's ratio of costs to charges. The numbers reported in this paper are based on the costs of uncompensated care.

Fourth, in using the cost-to-charge ratio to calculate the cost of uncompensated care, one implicitly assumes that the ratio is the same across procedures, patients, and payers, and that marginal costs are equal to average costs. These are all strong assumptions; unfortunately, it is difficult to accurately allocate costs to different patients and procedures.

Fifth, there are no nationwide public-use data on uncompensated care. The Health Care Financing Administration, which otherwise compiles very comprehensive information on hospital finances as part of its reimbursement mechanism, does not ask hospitals about uncompensated care. Other federal agencies do not collect uncompensated care data in a systematic way.

The only nationwide source of data on uncompensated care is the American Hospital Association's Annual Survey of Hospitals. The AHA survey has two important limitations. Because the survey is voluntary, some hospitals are reluctant to answer questions about finances; uncompensated care levels have to be imputed for these hospitals. The overall response rate is probably high enough, however, to provide a good picture of uncompensated care at the national and state levels. The second limitation of the AHA data arises from AHA's confidentiality agreement with hospitals about the financial variables in the survey. As a result of this agreement, data on these variables cannot be released to outside researchers. Therefore, the national results reported here are based on published and AHA studies by Fraser, Narcross, and Kralovec (1991a, 1991b, 1991c).

Many states collect detailed data on uncompensated care as part of their hospital planning and Medicaid reimbursement efforts. The advantage of these data sets is their ability to provide a complete view of uncompensated care at all hospitals within a state. In order to get an impression of recent trends in uncompensated care, we report a few statistics from Florida which we computed from data collected by that state's Health Care Cost Containment Board. There are important differences in uncompensated care between states, however, so one should be cautious in generalizing results from a single state.

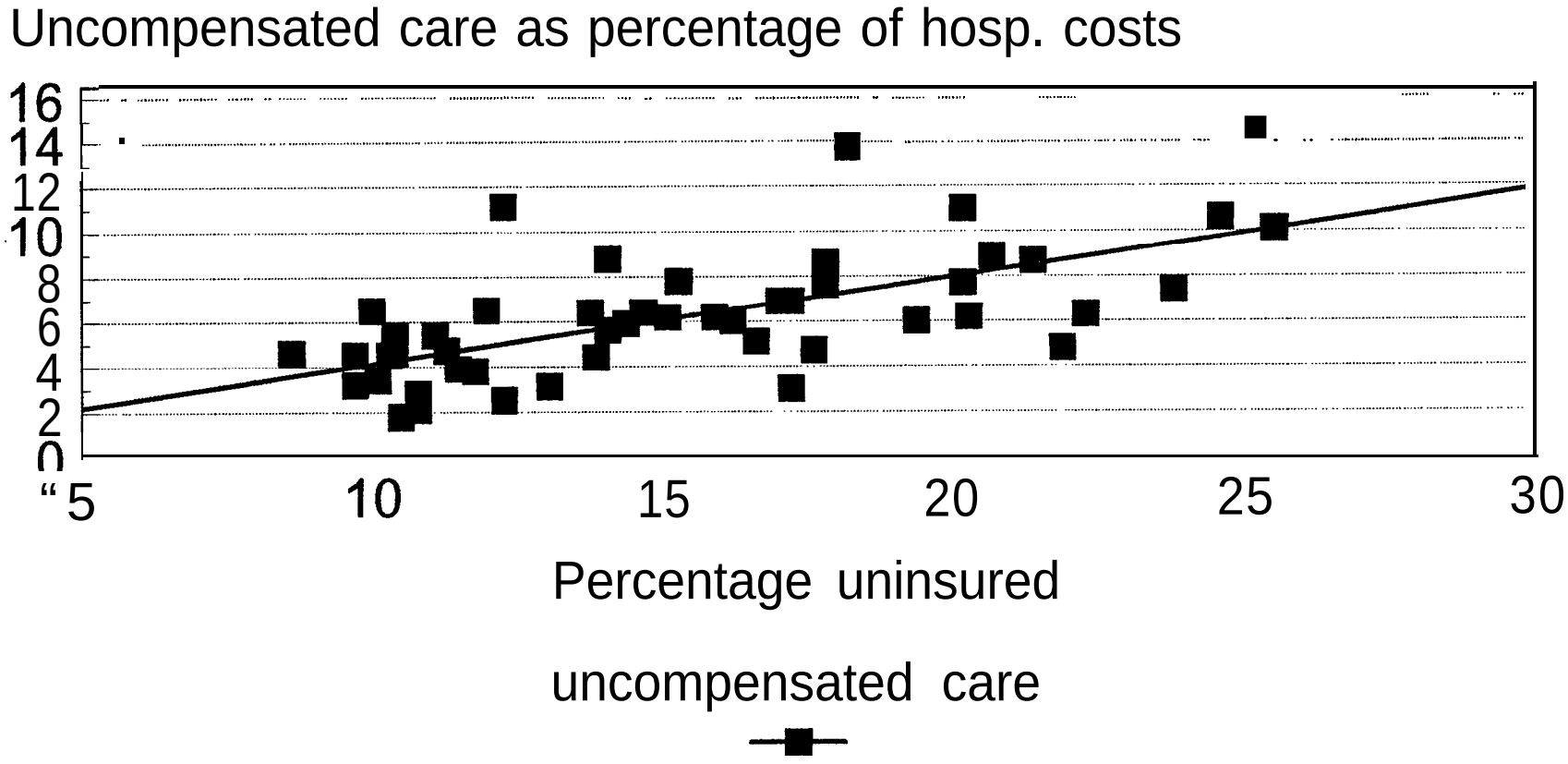
B. Trends in Uncompensated Care

Keeping the aforementioned limitations in mind, let us turn to the data. Figure 1.1 is a scattergram plotting uncompensated care as a percentage of hospital cost versus the percentage of the nonelderly population who are uninsured for each state in 1989. What is striking about this diagram is the wide variations in both uncompensated care costs and the percentage of uninsured. Uncompensated care costs range from 1.8 percent in Minnesota to 13.8 percent in the District of Columbia, with a national average of 6.0 percent, while the percentage of uninsured ranges from 9.7 percent in Michigan and Vermont to 25.5 percent in Texas, with a national average of 16.1 percent. The diagram also shows an obvious positive correlation between uncompensated care and the percentage of the uninsured. This correlation is .66. A simple regression of uncompensated care on the uninsured predicts that a 1 percentage point increase in the uninsured nonelderly population is associated with a .4 percentage point increase in uncompensated care.

The cross-sectional trend is quite intuitive: in states with high rates of the uninsured, a greater share of the patients who are treated in hospitals will receive uncompensated care.

The time-series relationship between uncompensated care and the uninsured is less clear. Although conventional wisdom suggests that the number of people without insurance increased throughout the 1980s, uncompensated care, measured as a percentage of hospital costs, did not rise monotonically during this period. Figure 1.2 shows uncompensated care as a percentage of hospital cost for the nation as a whole between 1980 and 1989. Uncompensated care costs rose from 5.1 percent of total hospital costs in 1980 to a high of 6.4 percent in 1986, before declining to 6.0 percent in 1989.

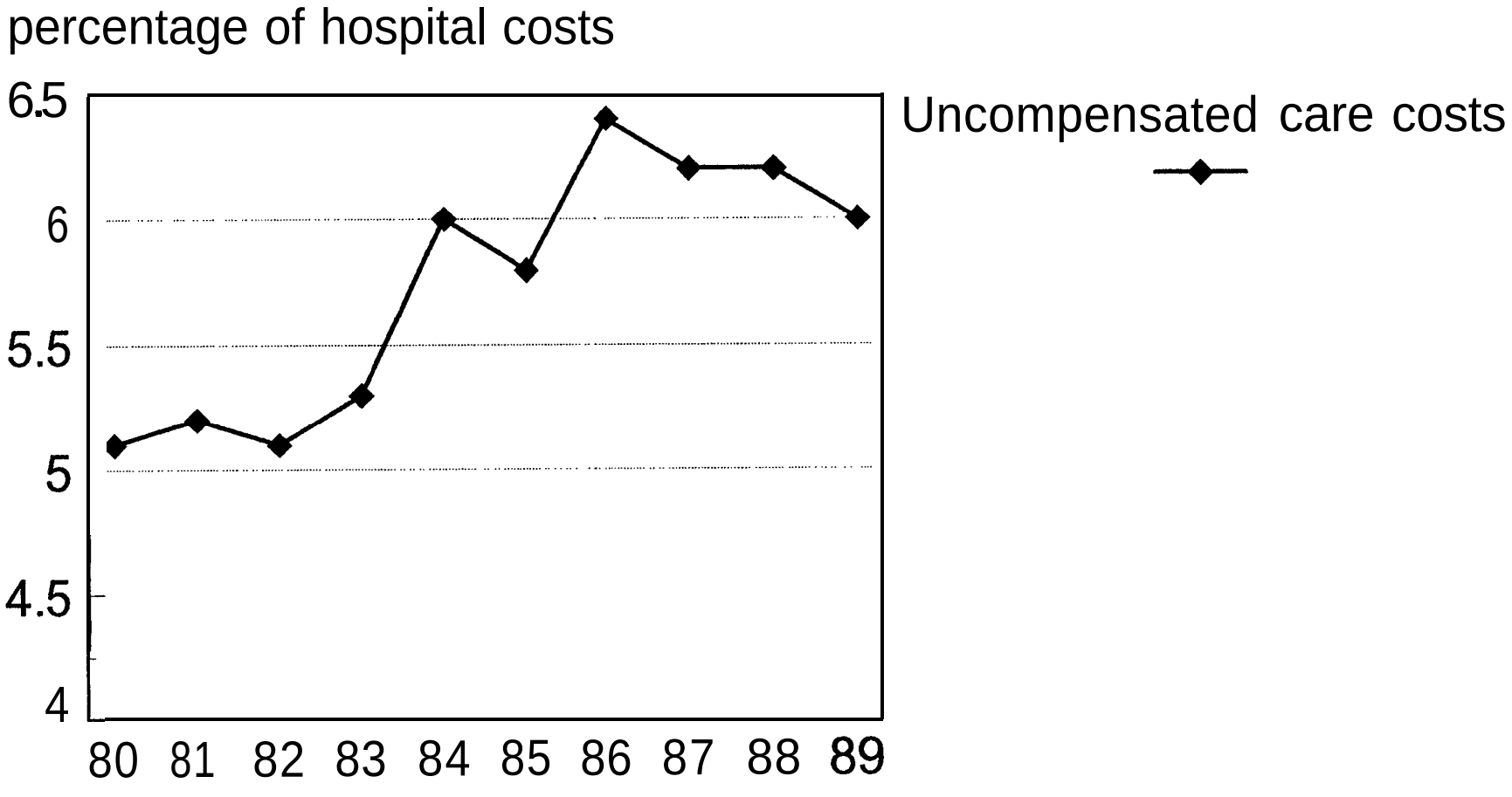
Fig. 1.1. Hospital Uncompensated Care and the Uninsured, 1989.



Source: Fraser, Narcross, and Kralovec, 1991 b;

Employee Benefit Research Institute, 1992

Fig. 1.2. Uncompensated Hospital Care in the United States, 1980-89



Source: Fraser, Narcross, and Kralovec, 1991 a

Figure 1.2 has several important implications. First, to the extent that uncompensated care measures care received by the uninsured, the uninsured receive less than a proportionate share of overall hospital spending. 13.6 percent of all Americans were uninsured in 1989, more than twice the percentage of uncompensated care (U.S. Bureau of the Census, 1991a). Some of the disparity arises because the elderly enjoy nearly universal insurance coverage through Medicare and consume a disproportionate share of hospital services. After subtracting the costs of treating Medicare patients, uncompensated care accounts for 9.8 percent of non-Medicare hospital costs in 1989.[2] This figure is still considerably less than the 16.1 percent uninsured rate among the nonelderly (Employee Benefit Research Institute, 1992). This result suggests that the uninsured face real barriers to hospital care, particularly if the uninsured are, on average, sicker than insured patients.[3]

Second, the overall increase in uncompensated care as a fraction of total hospital costs is perhaps smaller than might be predicted from the outcry about the growth of the uninsured. That is not necessarily a good thing: if the uninsured population is growing faster than uncompensated care, the uninsured probably face increasing barriers to hospital care.

Third, although the percentage of total costs accounted for by uncompensated care has only risen from 5.1 percent to 6.0 percent, the absolute dollar value has increased three-fold since 1980, rising from $3.9 billion to $11.1

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[2]According to Fraser, Narcross, and Kralovec (1991a), total hospital costs equaled $184.6 billion in 1989. Of this total, uncompensated care cost $11.1 billion, while Medicare costs equaled $71.2 billion.

[3]A number of earlier studies which directly examine patient care suggest that the uninsured receive between 31 and 80 percent of the hospital services received by the insured. See Garrison (1990).

billion in 1989. This is a substantial amount of money to be recovered from other sources.

Fourth, there is an inevitable time lag between the survey data and actual events. It is especially important to keep this lag in mind when looking at Figure 1.2, because the time period does not include the current recession. Recessions can be expected to increase the number of the uninsured, and therefore the potential base for uncompensated care, in three major ways. The first effect of the recession on the uninsured operates through state Medicaid programs. As state budget deficits rise, Medicaid is a natural target for budget cuts, or at least lower rates of increases, since the program is one of the largest sources of state spending. The second effect of the recession is on the margin between uninsured workers and privately-insured workers. A recession probably quickens the erosion of employer-based health insurance since employers are less able to absorb the rising cost of health insurance premiums when their own business is stagnant or faltering. The recession's third effect is to increase unemployment. As unemployed workers' incomes fall, many cannot afford to maintain payment on their health insurance policies. None of these effects are reflected in currently available data on uncompensated care, and they are only just beginning to be seen in data on the uninsured.

Trends in Medicaid spending help explain why uncompensated care rose as a fraction of total hospital costs during the early and mid-1980s, before falling somewhat between 1986 and 1989. In general, state Medicaid programs tightened eligibility requirements and benefit levels during the earlier period and expanded eligibility and benefits in the latter period (Brown and

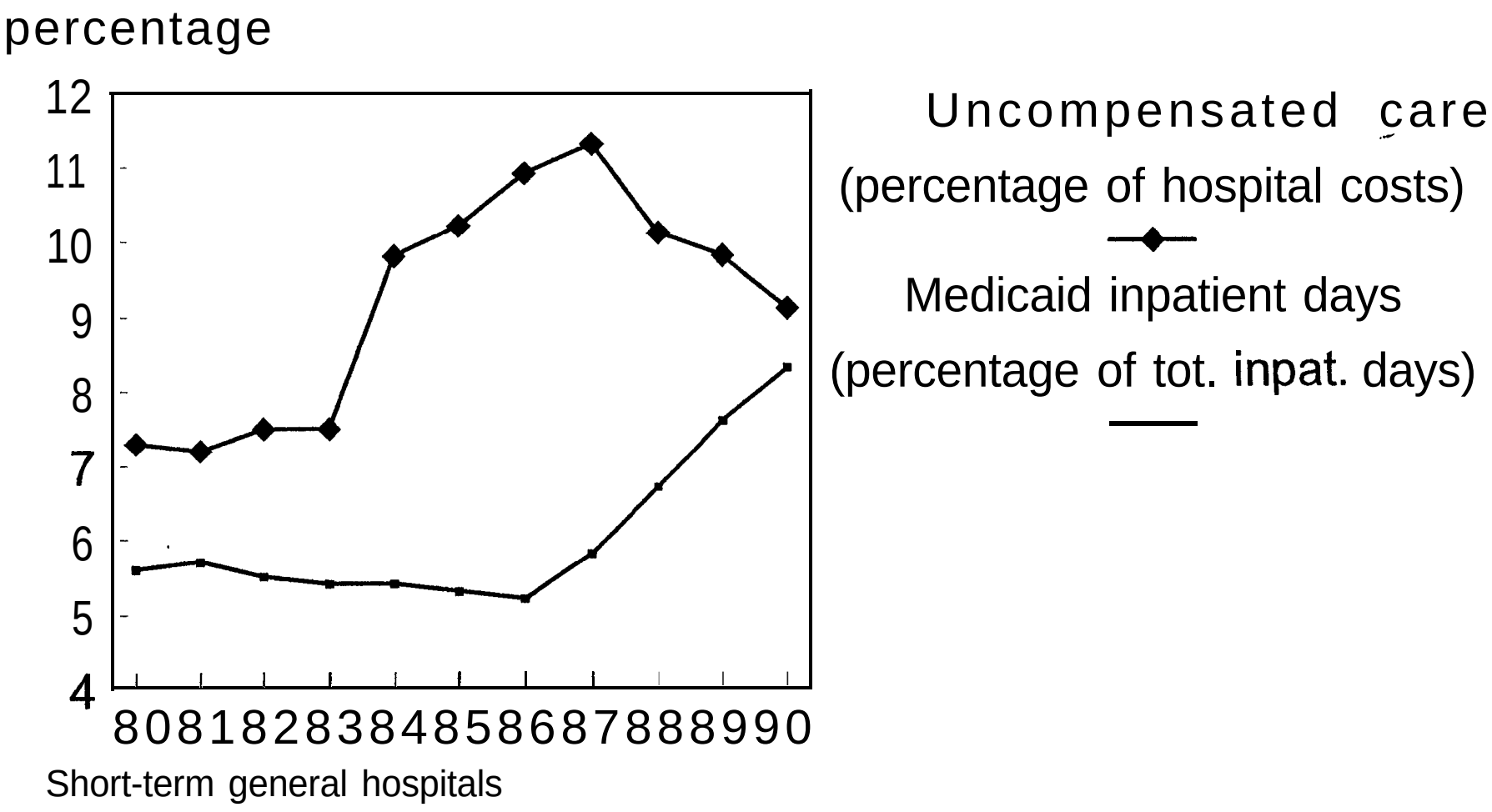
Dallek, 1990). The response of uncompensated care suggests that Medicaid and uncompensated care are partial substitutes for one another.

To further emphasize the relationship between Medicaid and uncompensated care, consider uncompensated care in the state of Florida (Figure 1.3). Compared to the rest of the nation, Florida has traditionally experienced high rates of the uninsured, low rates of Medicaid coverage, and high rates of hospital uncompensated care. These relationships are not coincidental. Figure 1.3 shows hospital uncompensated care as a percentage of hospital costs and Medicaid hospital inpatient days as a percentage of total inpatient days. Medicaid inpatient days gradually declined between 1980 and 1986, while hospital uncompensated care costs rose substantially. Medicaid inpatient days started to rise dramatically in 1987 and, within a year, uncompensated care costs fell by over two percentage points.

The close relationship between uncompensated care and Medicaid has important implications for all three of the potential uses for uncompensated care data. First, when monitoring uncompensated hospital care, one might interpret a decrease in uncompensated care as a reduction in access to care for the uninsured. If the decrease in uncompensated care is caused by an expansion in Medicaid eligibility or benefits, however, the previously uninsured may gain greater access.

Second, Medicare's current disproportionate share adjustment favors hospitals in states with liberal Medicaid eligibility requirements and/or generous benefit levels, since Medicare disproportionate share status is based

Fig. 1.3. Uncompensated Care and Medicaid Share, Florida, 1980-90



to a large extent on the percentage of Medicaid patients in the hospital.[4] Such hospitals will have relatively low amounts of uncompensated care but receive high disproportionate share payments. Conversely, hospitals in states with strict Medicaid eligibility requirements or limited benefits may have plenty of uncompensated care to finance, but not receive the disproportionate share adjustment since they have relatively few Medicaid patients.

Third, the wide variation in uncompensated care across states, caused partly by differences in Medicaid eligibility requirements and benefit levels, will complicate attempts to base not-for-profit hospitals' tax-exempt status on the level of uncompensated care provided. Hospitals in states with liberal Medicaid eligibility and/or generous benefit levels would be hurt if standards for tax-exempt status are based primarily on uncompensated care levels. This complication is most applicable for exemption from the federal income tax, where presumably a single national standard would have to be set; exemption from state and local taxes could be based on relative levels of uncompensated care within the state.

The lesson to be learned from the relationship between uncompensated care and Medicaid is that the relationship should not be ignored. Thus, both a hospital's level of uncompensated care and its level of Medicaid patients might be considered in determining whether a hospital qualifies for the disproportionate share adjustment or tax exemption.

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[4]Medicare disproportionate share status is also based on the percentage of Medicare patients treated in the hospital who receive federal supplemental security income payments. Although such elderly patients are likely to be large consumers of hospital care, they will make relatively little contribution to uncompensated care because they have Medicare coverage.

C. The Distribution of Uncompensated Care

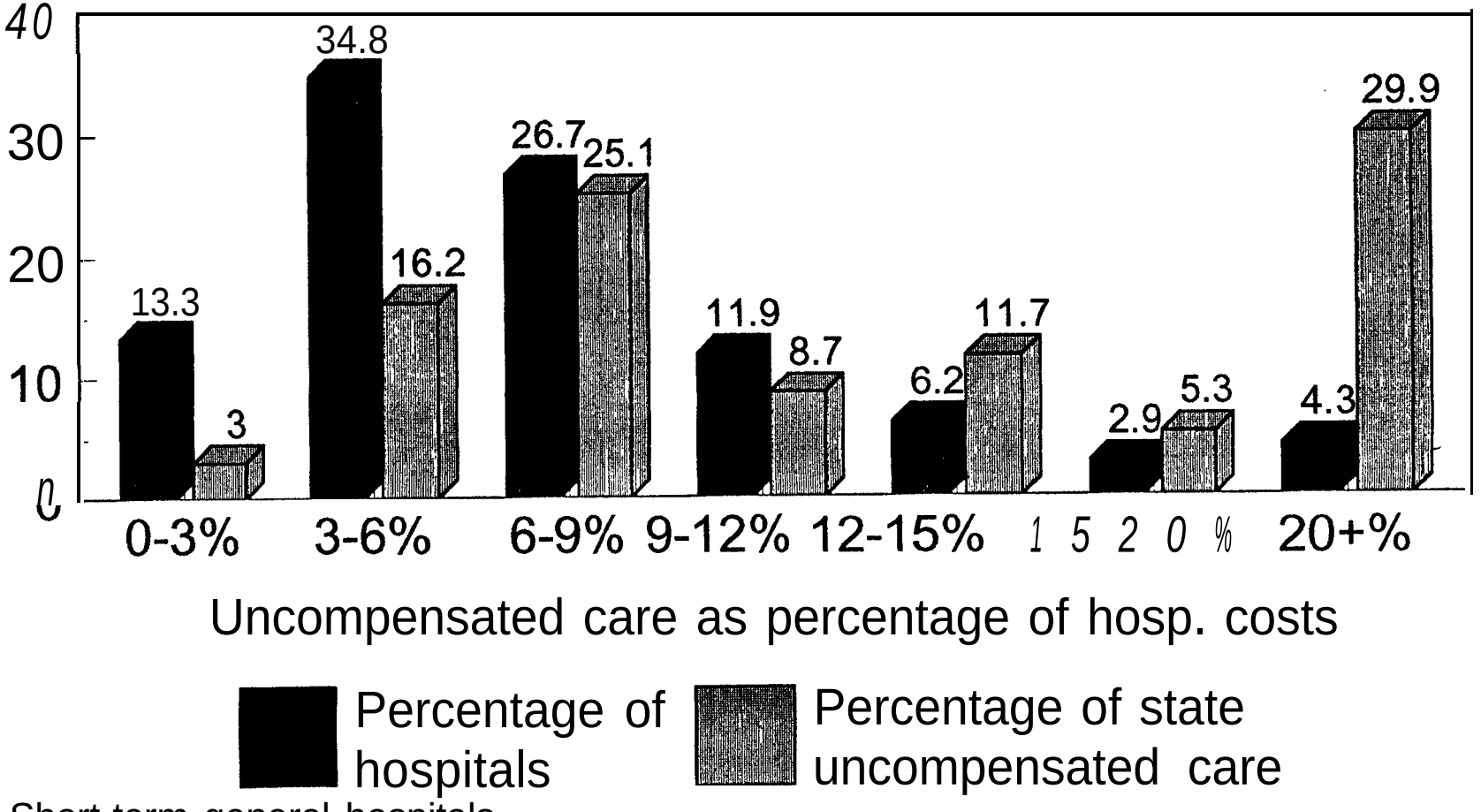
The distribution of uncompensated care across hospitals is quite uneven, with a few hospitals bearing a disproportionate share of the burden. The distribution in Florida is fairly typical, although the state has a higher than average rate of uncompensated care (Figure 1.4). About half of the short-term general hospitals have uncompensated care levels that are less than 6 percent of their overall costs, and 75 percent have below average levels. Conversely, nine hospitals (4 percent of Florida hospitals) have uncompensated care costs greater than 20 percent of their total costs. These nine hospitals account for 30 percent of all uncompensated care in Florida; the 25 percent of hospitals with above average amounts of uncompensated care provide 55 percent of all uncompensated care.

This distribution suggests that policies aimed at helping the uninsured and reducing the burden of uncompensated care can and should be targeted at individual hospitals, rather than the hospital industry as a whole. In general, public, urban, and teaching hospitals provide greater than average amounts of uncompensated care. The distribution also raises questions about whether hospitals currently providing high levels of care can continue to bear such burdens or absorb additional costs if the uninsured population rises. Financial problems at just one or a few of the hospitals providing large shares of uncompensated care could seriously jeopardize care for the uninsured.

D. Who Pays for Uncompensated Care and the Uninsured?

As we've seen, hospitals provide substantial amounts of uncompensated care, and most of that care goes to uninsured patients. Let us now turn to

Fig. 1.4. Distribution of Hospital Uncompensated Care, Florida, 1990



Short-term general hospitals

the question of who pays for the uninsured. Possible sources include the uninsured themselves, direct subsidies from state, local, and federal governments, private donations, and privately or publicly insured patients.

1. The Uninsured

As previously mentioned, some uncompensated care is provided to insured patients who do not pay their coinsurance or deductibles. Conversely, some uninsured patients do not receive uncompensated care; instead, they pay all or parts of their bills out-of-pocket. Unfortunately, hospital financial reports are not well-suited for determining how much uninsured patients pay for their care. For example, although Florida collects data on gross billed charges to self-pay patients, it does not measure how much hospitals actually collect. A study of patient bills estimated that uninsured patients paid about 18 percent of billed charges in Florida in 1985 (Duncan and Kilpatrick, 1987). Given that year's charge-to-cost ratio of 1.44, these payments would cover 26 percent of the costs of treating the uninsured.[5]

2. State and Local Governments

Many state and local governments make direct payments to hospitals providing uncompensated care. These tax subsidies were estimated at $2.1 billion in 1989 (Fraser, Narcross and Kralovec, 1991b), equaling 19.3 percent of hospital uncompensated care. Although tax subsidies nearly doubled between 1980 and 1989, they failed to keep pace with the growth in uncompensated care and overall hospital costs; the amount of uncompensated care covered by tax

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[5]Because the cost of hospital care has increased faster than personal income since 1985, the uninsured probably pay a lower share of their hospital costs currently.

subsidies fell from 27.7 percent in 1980 to 19.3 percent in 1989 (Ashby, 1991a). Most of the tax subsidies go to public hospitals, where trends in uncompensated care costs are closely related to trends in tax subsidies. Consequently, the decrease in tax subsidies has foreboding implications for public hospitals, traditionally one of the major sources of care for the uninsured.

From the standpoint of defining uncompensated care, an important question is whether uncompensated care should be measured gross or net of government subsidies. We will examine this question in the next chapter.

3. The Federal Government

The federal government's primary role in financing hospital care consists of insuring the elderly through Medicare and paying for insurance for the poor through state Medicaid plans. Regulations explicitly bar Medicare from basing reimbursement to a hospital on the amount of uncompensated care the hospital provides (except to the extent that Medicare beneficiaries incur bad debt). As already mentioned, Medicaid may partially substitute for uncompensated care.

Two components of Medicare's prospective payment system (PPS) may indirectly finance uncompensated care in hospitals. As mentioned earlier, some have justified the disproportionate share adjustment as a source of funding for uncompensated care. In addition, the indirect medical education adjustment increases Medicare payments to hospitals employing interns and residents; some policymakers justify this adjustment by arguing 'that teaching hospitals, the primary beneficiary of the indirect medical education adjustment, provide above average amounts of uncompensated care. Ashby (1991b),

however, reports there is relatively little correlation between a hospital's indirect medical education payment and uncompensated care as a fraction of total costs. The correlation between disproportionate share payments and uncompensated care is stronger, but only explains 19 percent of the variance in the uncompensated care fraction.

Given the low correlation between the indirect medical education and disproportionate adjustments and uncompensated care, it is unclear how much, if any, of the adjustments to count as financing for uncompensated care. A better case can be made for including the disproportionate share adjustment, which equaled $1.1 billion in fiscal year 1989.

4. Charitable Contributions

Although philanthropy played a central role in the early development of American hospitals, its importance as a funding source has long since been overshadowed by the growth of private and public insurance (Sloan, et al., 1990). Charitable giving now accounts for only about 1 percent of health care operating costs and 5 percent of capital expenditures (Ginzberg, 1991). Little data exist on how closely these charitable contributions are tied to uncompensated hospital care. At one extreme, assuming that all contributions toward operating costs and none of the contributions for capital expenditures are used to finance uncompensated care and the rate of charitable contributions for operating costs at hospitals mirrors the 1 percent overall rate for all health care, then charitable contributions cover about one-sixth of all uncompensated care. At the other extreme, if most of the contributions flow to not-for-profit hospitals that provide little uncompensated care, charitable contributions will provide a negligible source of financing for uncompensated

care.' In other hospitals, contributions that are not explicitly tied to patient care may have little effect on uncompensated care: Thorpe and Phelps (1991) find that unrestricted revenue grants to hospitals in New York have no impact on the amount of uncompensated care provided.

5. Other Patients--Cost-shifting

The residual source of funding for uncompensated care is revenue from other patients. Discussion of this source takes one squarely into the controversy over hospital cost-shifting. We define cost-shifting as occurring when a change in reimbursement from Medicare or Medicaid or a change in the provision of uncompensated care leads to an opposite change in the price charged to privately-insured patients. The usual context for discussions of cost-shifting involves Medicare or Medicaid reducing reimbursement, causing hospitals to raise prices to private patients. In this context, hospital administrators blame stingy public insurers and growing uncompensated care for escalating private hospital prices and insurance premiums.

Some hospital administrators consider differences in the net prices paid by different insurers as prima facie evidence that cost-shifting occurs. Such price differentials clearly exist. By themselves, however, the differences do not provide clear-cut evidence of cost-shifting. Hospitals may charge different prices to different payers because some payers are more price-sensitive than others. Economists call such behavior price discrimination, a term which makes physicians and hospital administrators uneasy. Price discrimination has an important implication for cost-shifting: if a hospital

[6]For example, donors may wish to be associated with the new, modern hospital being built in the suburbs. Such a hospital may have a comparatively low rate of uncompensated'care.

maximizes profits and faces roughly constant marginal costs, then a decrease in reimbursement from Medicare or Medicaid will have no effect on the price paid by private patients. No cost-shifting will occur, because the hospital will already be charging the price that maximizes profit from private patients.

A more plausible explanation for cost-shifting arises from the predominance of not-for-profit hospitals in the hospital industry.' Figure 1.5 illustrates why a not-for-profit hospital may cost-shift. It also shows the voluntary and therefore tenuous position of uncompensated care within the hospital's decision-making process. The figure shows the hospital's profit from treating private patients as a function of price. Profit initially rises as price increases; as price becomes too high, however, patients either move to other hospitals or forego hospital care altogether (equivalently, they forego health insurance as the premiums for hospital coverage become too expensive). Thus, p^* is the price that maximizes profits from private patients, and this is the price a profit-maximizing hospital would charge.

A not-for-profit hospital, however, may have incentives different than profit-maximization. A natural assumption is that the not-for-profit hospital will attempt to maximize these objectives, subject to the constraint that the

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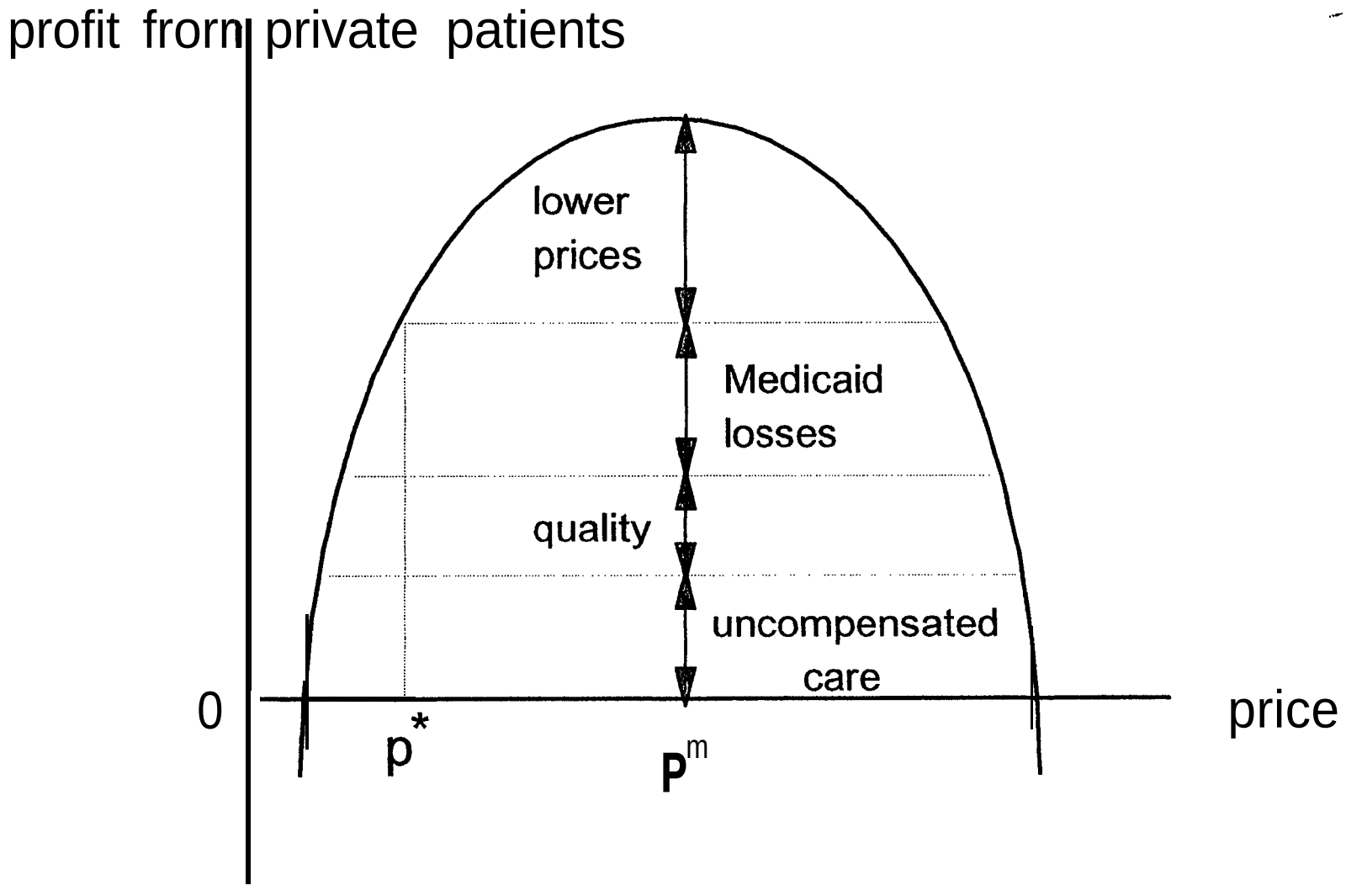
'For-profit hospitals also provide uncompensated care, and a lingering debate exists on whether they provide amounts comparable to not-for-profit hospitals (see Sloan, Valvona, and Mullner, 1986; Herzlinger and Krasker, 1987; and Lewin, Eckels, and Roenigk, 1988). At first glance, it is unclear why a for-profit hospital would provide any uncompensated care. However, true bad debts may account for much of their uncompensated care, and treating a few uncompensated care patients who cannot be turned away may be the cost of running an otherwise profitable emergency room. In addition, the favorable publicity from treating uncompensated care cases may compensate the hospital for its costs.

Fig. 1.5. Profit from Private Patients



hospital breaks even.[8] We can think of the hospital as "spending" the potential profits in Figure 1.5 to achieve its objectives. The hospital can spend its profits on a number of things. It can provide care to Medicare and Medicaid patients with reimbursement less than cost. It can lower its price to private patients, thereby increasing the number of private patients treated. It can enhance its perceived quality by investing in "excessive" (i.e., non-profit-maximizing) technology. It can operate with inefficient managerial "slack" by failing to minimize costs. And the hospital can spend some of its potential profit on the provision of uncompensated care to uninsured patients.

The way a particular hospital spends its profit will depend on the hospital's objective or "mission". In Figure 1.5, the hospital spends some of its profit on lowering the price to private patients to p^*, some on treating unprofitable Medicaid patients, some on quality, and some on uncompensated care. For the moment, assume that the hospital also treats Medicare patients, but the Medicare reimbursement just covers costs. The point of the figure is that the provision of uncompensated care depends on the hospital's mission and the amount of profit the hospital has to spend. As the wide distribution of uncompensated care across hospitals attests, hospital missions may vary greatly, and there is no guarantee that uncompensated care will have the highest priority in a hospital's mission. Moreover, uncompensated care will be very sensitive to factors which affect the amount of profit a hospital has

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'Not-for-profit status does not prohibit a hospital from earning or maximizing profits, but it does prohibit the hospital from distributing these profits directly. Hoerger (1991) rejects the hypothesis that not-for-profit hospitals behave as if they maximize profits.

to spend, such as Medicare and Medicaid reimbursement rates or competition between hospitals for privately-insured patients.

Figure 1.6 shows what happens if Medicaid cuts its reimbursement rate.' If the hospital continues to serve the same number of Medicaid patients, the profits from treating private patients will no longer cover its other expenditures. The hospital will have to change its behavior if the zero profit constraint really is binding. One response the hospital can make is to raise its price to private patients and use the higher profits to pay for the increased losses on Medicaid. This is the type of cost-shifting hospitals emphasize. The hospital is more likely to combine several responses: it may raise prices, treat fewer Medicaid patients, cut back on technology, and reduce uncompensated care. Again, a particular hospital's mission will affect how it responds.

Three points are worth emphasizing here. First, cost-shifting arises if not-for-profit hospitals do not maximize profits from private patients. A profit-maximizing hospital would charge the higher price p" both before and after the reduction in Medicaid reimbursement. Second, under this broader definition of cost-shifting, private patients do not bear the full burden of cutbacks in Medicaid or Medicare reimbursement. Finally, some of the burden will probably be spread to the uninsured: uncompensated care will fall.

6. Private Cost-Containment and Uncompensated Care

In an attempt to contain health care costs, millions of privately-insured patients have enrolled in preferred provider organizations (PPOs). A PP.0 negotiates price discounts from hospitals; in return, the PPO steers its patients to the discounting hospitals. Effectively, the PPOs make the demand

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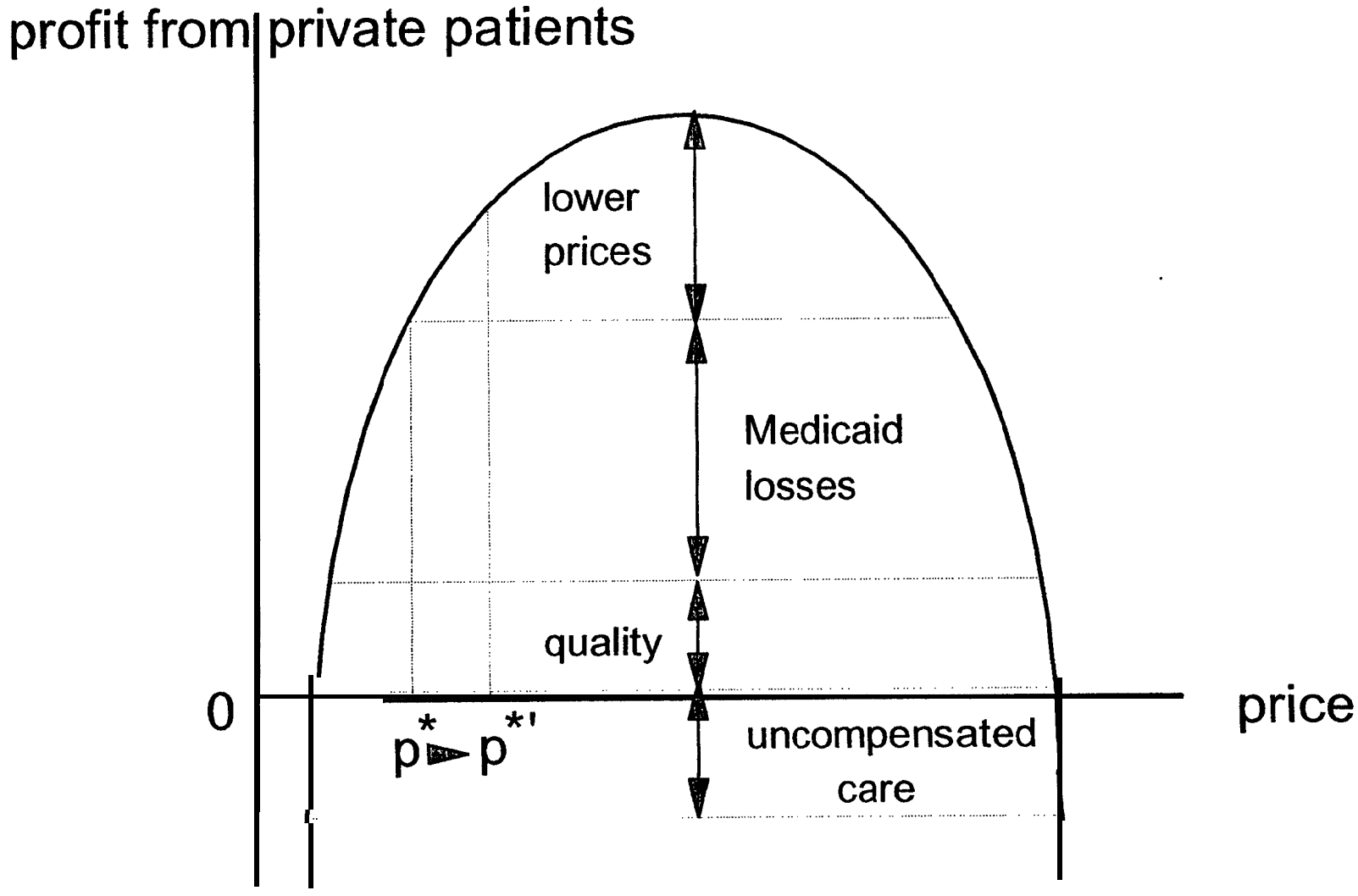
'Cuts in Medicare reimbursement will have similar effects.

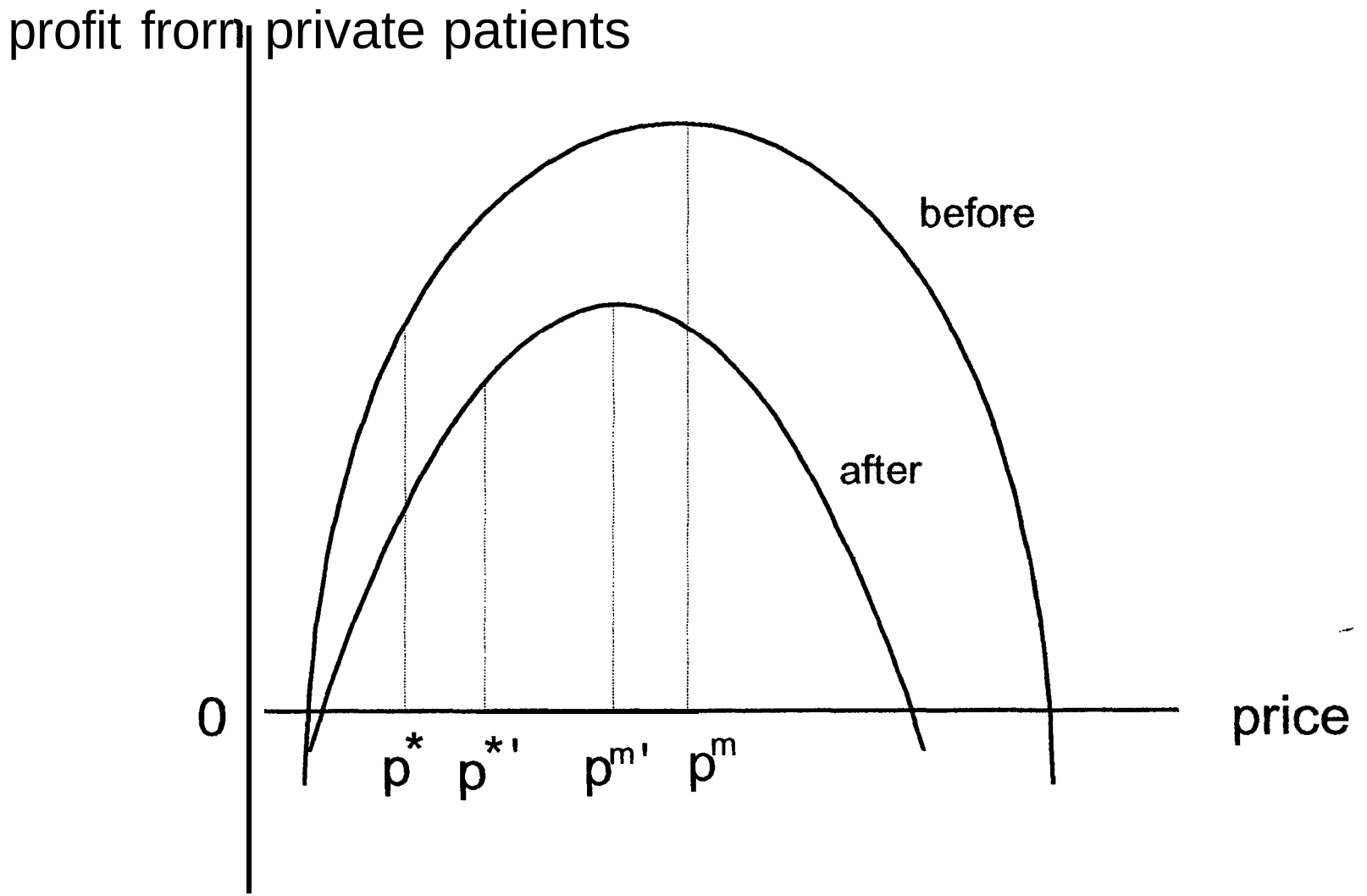
Fig. 1.6. Medicaid Reimbursement Falls: Cost Shifting



from privately insured patients more price sensitive, thereby intensifying price competition between hospitals.

An increase in competition lowers the hospital's profit curve at all prices (Figure 1.7). This has three important effects. First, the hospital will have lower profits to spend on its objectives, further squeezing uncompensated care. Second, increased competition may limit the gains from cost-shifting, since the profit-maximizing price will likely fall. Price increases beyond p*' will only reduce profits: you can only squeeze so much blood out of a turnip and so much profit out of private patients. Finally, the cost-shifting that does occur may increase the number of uninsured by further exacerbating the crisis in insurance premiums facing small employers. Because large employers can offer a hospital many patients, they are better able to negotiate discounts through PPOs. Faced with, say, a 10 percent discount to the PPO, a hospital may raise its price by 5 percent. The large employer will receive a net discount of 5 percent, but small employers, with little buying power to negotiate discounts, will actually face higher prices and therefore higher insurance premiums. Because of adverse selection and higher administrative costs, small employers already face higher premiums than large employers; the additional burden may force small employers to drop coverage altogether. Unfortunately, with lower profits hospitals will have little room to increase uncompensated care to the newly uninsured. In an unpublished study of California hospitals between 1983 and 1989, Gruber (1991) finds evidence that increasing PPO penetration reduced hospital uncompensated care.

Fig. 1.7. PPOs Make Demand More Price Sensitive



CHAPTER 2. CONCEPTUAL ISSUES

In this chapter, we discuss the basic conceptual issues which must be addressed in order to measure uncompensated care. We will resolve some of these issues within this chapter by examining the previous literature on uncompensated care. Other issues turn on practical complications, such as the ability of hospitals to distinguish between bad debt and charity care; we will not resolve these issues until after the relevant practical evidence on hospital accounting systems and data collection efforts are presented in Chapters 3 and 4. Final recommendations will be presented in Chapter 5.

We present the issues as a series of questions. This format, as well as some of the questions, was inspired by Ashby (1991c).

1. What do we want to measure?

Most recent literature on hospital uncompensated care focuses on operational measures of uncompensated care based on existing data sources. Before reaching the operational stage, however, there is an important question: What exactly do we want to measure when we measure uncompensated care? Conceptually, we believe that measures of hospital uncompensated care should embody two essential principles. First, uncompensated care should represent care provided to people who cannot afford to pay for that care. Second, the hospital's actual contribution to uncompensated care should be measured.

Potentially, there is an immediate objection to our first principle: Why not define uncompensated care as any care that is not paid for, regardless of the recipient's ability to pay? We justify the first principle on the

basis of the three potential uses of uncompensated care which we identified in Chapter 1. In the first use we identified, policymakers would collect data on uncompensated care to help monitor the effects of policy on hospital finances and access to care by the uninsured. Both of these effects are closely related to care provided to people who cannot afford to pay for their care and less closely related to people who can afford to pay for care. In the second and third potential uses of uncompensated care data, the amount of uncompensated care provided would be used as a criteria for determining eligibility for tax exemption or increased reimbursement for disproportionate share hospitals. Most proponents of these uses state that the criteria would reward (punish) hospitals that provide (do not provide) care to those who cannot afford it. Under this reasoning, government subsidies would not be provided for care to patients who could afford to pay for that care.

The second principle follows from the first. At least conceptually, we should base the measurement of uncompensated care on how much the hospital foregoes when it provides the care. This principle will be applied below when we discuss whether uncompensated care should be measured on the basis of charges or costs, and if costs are chosen, whether incremental or average costs should be used.

2. Bad debt vs. charity care: Should bad debt be included as uncompensated care?

Operationally, most recent studies of uncompensated care define uncompensated care as the sum of bad debt and charity care (see, for example, Fraser, Narcross, and Kralovec, 1991a; Sloan, Valvona, and Mullner, 1986; and Thorpe and Phelps, 1991). Traditionally, bad debt has been defined as the

charges owed by patients who can afford to pay but don't, while charity care has been defined as the charges owed by patients who cannot afford to pay." According to our conceptual principles, bad debt is a normal cost of doing business and probably should be considered separately from charity care, which is more clearly a contribution from the hospital to people who cannot afford to pay.

In actual practice, however, the distinction between bad debt and charity care is often difficult to make. The traditional distinction requires hospitals to judge, usually on the basis of income, whether or not a patient can afford to pay his bills. Although most hospitals have written or unwritten policies for making this judgement. the policies differ substantially between hospitals. Consequently, the distinction between bad debt and charity care varies considerably between hospitals, complicating inter-hospital comparisons which focus exclusively on either bad debt or charity care.

Some evidence suggests that reported measures of bad debt include care received by persons who cannot afford to pay for the care. Studies of individual patient bills in Florida and Indiana suggest that about two-thirds of all uncompensated care, including bad debt, is actually received by uninsured patients (Duncan and Kilpatrick, 1987; Saywell, et al., 1989). Because of‘large deductibles, coinsurance, and uncovered services, some of the care received by insured patients can also legitimately be characterized as charity care.

"Formally, the Healthcare Financial Management Association states that "the basic distinction between bad debts and charity service in the health care setting is adequately described in the literature by differentiating between the unwillingness to pay and the demonstrated inability to pay" (Healthcare Financial Management Association Principles and Practice Board, 1987).

Aside from the inherent difficulty in distinguishing between bad debt and charity care, hospitals in many states have little incentive to make the distinction. Because hospital accounting systems track charges and reimbursement, it is relatively straight-forward for the systems to produce a single figure for uncompensated care. The figure simply equals the difference between charges and reimbursement, minus contractual allowances to private and public insurers. Dividing the figure accurately into bad debt and charity care components requires additional cost that hospitals will understandably be reluctant to incur unless there are tangible gains from doing so. Tangible gains would be received from distinguishing between bad debt and charity care if tax-exempt status or disproportionate share payments are based on charity care alone. Consequently, if such policies are adopted, the relative mix of bad debt and charity care will probably change, even if total uncompensated care remains constant.

Standards based on charity care alone will necessarily be more restrictive than standards based on the broader measure of uncompensated care. Because reported levels of bad debt at the average hospital are typically two or three times larger than reported levels for charity care, the difference in standards may be quite substantial. For example, the General Accounting Office (1990) found that about 15 percent of hospitals in five states supplied uncompensated care whose value was less than the value of their potential income tax liability. However, 57 percent of hospitals in the three states with information available on charity care provided less charity care than the value of their potential income tax liability.

HCFA has several options if it decides to collect information on uncompensated care. First, HCFA could ratify the definition of uncompensated

care as the sum of bad debt plus charity care. Such a decision would basically accept the proposition that bad debt and charity care are too difficult to distinguish in practice. This option will minimize implementation costs for hospitals, since most hospitals can easily calculate total uncompensated care. Separate categories for bad debt and charity care might still be reported, and state or local jurisdictions could use this information as they liked. Alternatively, if HCFA believed that other jurisdictions would misinterpret the data on charity care, HCFA could only report the aggregated uncompensated care figure for each hospital.

Second, HCFA could establish a level of bad debt that corresponds to the "normal" cost of doing business. Uncompensated care would then be defined as the sum of a hospital's bad debt and charity care minus the estimated normal bad debt. For tax exemption purposes, this approach has the advantage of treating hospitals in a manner similar to other businesses that face bad debts. It would also be a relatively costless policy to implement. The option's disadvantage is that HCFA would have to determine the "normal" level of bad debt. Several possibilities exist: the average bad debt level for for-profit hospitals which provide no charity care, average bad debt levels for Medicare patients, or levels of bad debt in comparable nonhospital businesses. With respect to the latter possibility, hospitals appear to face greater bad debt expenses than most other industries. Although cross-industry comparisons of bad debt levels are complicated by differences in accounting practices, existing data suggest that hospital bad debt is higher than bad debt in other industries, probably because some of the hospital bad debt actually does represent charity care. Troy (1992) reports that hospital bad debt equals 4.0

percent of net sales," while the averages for all industries and all services are .7 and .6 percent respectively. The only individual industries with higher bad debt levels than hospitals are banking holding companies (5.7 percents), savings and loans (5.7 percent), and personal credit institutions (9.4 percent).

Third, HCFA could focus only on charity care, but allow hospitals to set their own policies, within broad guidelines, on the distinction between bad debt and charity care. This option recognizes the difficulty in setting universal standards for distinguishing between bad debt and charity care. With a better knowledge of their patients, a hospital can probably develop a more useful standard for classifying charges as charity care or bad debt. The most obvious disadvantage of this approach is that the general guidelines might be broad enough for smart hospitals to classify even true bad debt as charity care. Such behavior might be limited by requiring hospitals to provide written charity care policies and demonstrate, if challenged, that the policies are followed consistently.

The fourth option, defining explicit standards on what does and does not qualify as charity care, could be the most expensive to implement for both HCFA and hospitals. HCFA will have to carefully define the standards to cover all reasonable contingencies. It will probably also have to perform costly audits on hospital compliance. Hospitals will have to document their compliance with the regulations. On the positive side, more explicit standards will make reported bad debt and charity care more comparable across hospitals.

To a large degree, which option is chosen depends on the purpose for which uncompensated care information is collected. If the data will only be

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"It is not clear whether Troy includes charity care as bad debt.

used to monitor hospital finances and access to care, the first option is probably sufficient, since it could be implemented with minimal costs. More explicit standards will probably need to be developed if charity care levels are used as criteria for tax exemption or disproportionate share payments. The costs of compliance with these standards will probably be highest for the tax-exempt status since almost all not-for-profit hospitals will seek the exemption. In contrast, if charity care standards only apply to Medicaid or Medicare disproportionate share status, only the relatively few hospitals expecting to satisfy the requirements would have to comply.

We will withhold recommending between charity care and uncompensated care until after Chapters 3 and 4. We ask two key questions in those chapters:

1. How well can and do hospitals distinguish between bad debt and charity care?
2. What standards--state or otherwise--currently govern the distinction between bad debt and charity care?

3. Costs vs. charges: How should uncompensated care be measured?

Historically, hospitals have recorded gross patient revenues on the basis of charges. Net patient revenues are then calculated by subtracting off bad debt, charity care, and discounts to insurers, which are termed "contractual allowances". Thus, the data hospital accounting systems produce on bad debt and charity care are valued in terms of the charges for that care.

Our second principle of measuring uncompensated care implies that cost is a much better measure of a hospital's contribution to uncompensated care than charges. Hospitals do not expect to receive anything when they provide

uncompensated care: therefore, their contribution consists of the costs of the care provided, not the charges they never expected to receive.

Valuing uncompensated care on the basis of charges also introduces biases when comparing uncompensated care over time and between hospitals. Currently, almost no one pays listed hospital charges. In 1990 in Florida, for example; we calculate that Medicare paid about 46 percent of charges, Medicaid paid 49 percent of charges, and even private insurers paid only 91 percent of charges. Discounts were much less common in the past. Consequently, studies which compare the amount of uncompensated care charges in the past to current levels will seriously overstate the increase in uncompensated care unless they correct for the growing difference between gross charges and actual payments.

Different hospitals also charge different mark-ups over costs (the mark-up is the percentage difference between a hospital's price and its costs). A hospital with a large mark-up over costs will appear to provide more uncompensated care, as measured by charges, than a hospital with a lower mark-up if both hospitals provide the same amount of uncompensated care costs. For this reason, Lewin, Eckels, and Roenigk (1988) argue that studies comparing the uncompensated care charges of for-profit and not-for-profit hospitals overstate the amount of uncompensated care provided by for-profit hospitals, since for-profits appear to have higher mark-ups than not-for-profit hospitals.

The only advantage of measuring uncompensated care on the basis of charges instead of costs is that hospital accounting systems automatically produce uncompensated care figures in terms of charges. Given the disadvantages of using charges, we recommend that--for policy purposes--uncompensated

care be measured in terms of costs. Problems in converting uncompensated care charges to costs are discussed in the next two issues.

4. What type of cost should be used?

Conceptually, the best measure of uncompensated care cost is the incremental cost of producing uncompensated care (Phelps, 1986). The incremental cost is the difference between the hospital's total cost of producing given levels of compensated and uncompensated care and its cost when it produces that level of compensated care, but no uncompensated care.[12] Thus, the incremental cost provides an excellent measure of a hospital's contribution, since the incremental costs could be avoided simply by not providing uncompensated care.

Despite their conceptual merit, hospital incremental costs are notoriously difficult to measure. Measuring incremental costs requires a hospital administrator to successfully complete the following thought experiment: how much would my costs be if I produced current levels of compensated care, but no uncompensated care? The experiment is difficult because the costs without providing uncompensated care are never actually observed by the hospital. In principle, incremental costs could be calculated by estimating hospital cost functions over a cross-section of hospitals with differing output levels. Incremental cost would then be calculated by comparing a hospital's estimated costs with and without its production of uncompensated care. For two reasons, this approach is unlikely to be feasible for uncompensated care. First,

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"Incremental costs are closely related to the more familiar concept of marginal cost, except that marginal cost measures the change in cost when one additional unit is produced, while incremental cost measures the change in cost when uncompensated care rises from 0 units to X units.

despite numerous attempts to estimate hospital cost functions, economists still have not reached consensus on the appropriate functional form and explanatory variables. In addition, most estimates explain relatively little of the variance in hospital costs. Second, estimating cost functions is a fairly data-intensive task. It is probable that the costs of collecting this data exceed the benefits from calculating the conceptually correct incremental costs.

Using cost-to-charge ratios costs to convert uncompensated care charges into costs is a simple alternative to calculating the incremental costs of uncompensated care. The simplest cost-to-charge ratio equals the hospital's total expenses divided by its gross patient revenues. Any data set which collects information on uncompensated care will probably also collect information on total expenses and revenues.

Applying the cost-to-charge ratio either imposes the assumption that average costs are constant in a hospital or the assumption that fixed costs should be allocated evenly among patients, regardless of payer. Because most hospitals have large fixed costs, the assumption that average costs are constant is incorrect. Consequently, using the cost-to-charge ratio to convert uncompensated care charges to costs will overstate the incremental costs associated with uncompensated care. Although hospital administrators might argue that all patients should bear their fair share of fixed costs, this contention is not well-supported by economic theory.[13]

Given that use of the cost-to-charge ratio overstates the incremental costs of uncompensated care, it is important to examine whether the bias varies with the amount of uncompensated care a hospital provides. Plausibly,

[13]See Ramsey (1927) and Baumol and Bradford (1970).

the bias is greater for hospitals providing relatively little uncompensated care. Because beds have to be staffed and operating rooms maintained for paying customers, costs will rise little if an occasional uncompensated care patient is treated. For hospitals treating large numbers of uncompensated care patients, say 20 percent of their patients, the increased scale from treating uncompensated care patients will translate into large incremental costs. Additional nurses will have to be hired, emergency rooms staffed, and possibly beds expanded. In this case, the bias from using the cost-to-charge conversion may be relatively small.

The preceding discussion of bias assumes that the cost of treating an indigent patient is the same as treating an insured patient with the same illness. Some researchers have argued that indigent patients are more costly to treat because they enter the hospital sicker since they could not afford primary care. Severity of illness can affect the costs of treating patients in two ways, with different implications for measuring uncompensated care. First, more severely ill patients may receive more services to treat a given illness or diagnosis. The additional services will be reflected in higher charges, so the conversion to costs by the cost-to-charge ratio should introduce little bias into the measurement of uncompensated care. Alternatively, more severely ill patients may receive the same services as a less ill patient, but use these services more intensely. Both patients will receive the same charges, but the hospital will incur greater costs in treating the severely ill patient. In this case, a straight conversion to costs using the cost-to-charge ratio will understate the cost of treating uncompensated care patients, if the uncompensated care patients truly are sicker.

For practical reasons, we recommend that cost-to-charge ratios should be used to convert uncompensated care charges to costs. People using the converted data should recognize that the conversion overstates the more appropriate concept of the incremental cost of uncompensated care (assuming severity is constant). As mentioned, we believe this bias will be larger for hospitals providing relatively small amounts of uncompensated care. For two of the potential uses of uncompensated care data, as criteria for tax-exempt or disproportionate share status, hospitals providing small amounts of uncompensated care are likely to be on the margin between qualifying and not qualifying. In a sense, the conversion will give these hospitals the benefit of the doubt, since the conversion's upward bias will be larger for hospitals with low levels of uncompensated care.

5. What cost-to-charge ratio should be used to deflate charges to costs?

As mentioned above, the simplest cost-to-charge ratio equals the hospital's total expenses divided by its gross patient revenues. Using this ratio to convert uncompensated care charges to costs implicitly assumes that the ratio between charges and costs for the procedures received by uncompensated care patients is the same as the average ratio for all patients in the hospital. If the mark-up on procedures received by uncompensated care patients is higher than the average mark-up in the hospital, the conversion will overstate uncompensated care costs. Conversely, if the mark-up is lower, the conversion will understate the costs of uncompensated care.

A hypothetical example illustrates a case where the conversion overstates the cost of uncompensated care. Suppose that a hospital treats two types of illness which have costs of $1000 per case. 100 insured patients

and no uninsured patients incur illness 1, while 50 insured patients and 50 uninsured patients incur illness 2. Finally, the hospital sets prices to break even on each illness. Such behavior can be interpreted as an extreme form of cost-shifting where the hospital tries to ensure that each of its departments breaks even. Breaking even requires that p_1 equals $1000, while p_2 equals $2000. Consequently, total charges equal $300,000, total costs equal $200,000, and the cost-to-charge ratio equals 2/3. Converting the uncompensated care patient's charges to costs produces costs equal to $66,667 (- 50 x 2000 x (2/3)). However, the actual cost of treating these patients was $50,000.

The conversion overstates the true uncompensated care cost because the cost-to-charge ratio for the procedure used by the uninsured is smaller" than the hospital's overall cost-to-charge ratio. As the example suggests, such a result might arise if a hospital attempts to cost-shift at the individual procedure level. To our knowledge, no published study has directly tested whether the cost-to-charge ratio for procedures received by uncompensated patients is similar to the hospital's overall cost-to-charge ratio. We describe a possible test in Chapter 5.

However, Table 2.1 indirectly suggests that cost-to-charge ratios may differ between the procedures received by different types of payers. The table shows the margins, defined as net revenue minus costs, paid by Medicare, Medicaid, and private insurers in Florida in 1990. Net revenue for each payer comes from the state's hospital cost report, while each payer's cost is calculated by multiplying gross charges to the payer by the average cost-to-charge ratio in the hospital As calculated, both Medicare and Medicaid have

"Equivalently, there is a greater mark-up over cost.

Table 2.1. Hospital Margins By Payer, Florida, 1990, Using Overall Hospital Cost-to-Charge Ratios.

	Margin (net rev./costs) (%)	Surplus/Shortfall (million $)
Medicare	82.1	(891)
Medicaid	83.9	(137)
Privately insured	156.6	2,400
Uncompensated care	0.0	(949)

margins less than one; that is, if the average cost-to-charge ratio is the correct conversion factor, Medicare and Medicaid payments cover little more than 80 percent of the programs' costs.

Medicare and Medicaid administrators would probably challenge this assertion. A likely starting point for the challenge is the assumption that cost-to-charge ratios are the same for the mix of procedures covered by each payer. Medicare officials might point to the preceding example and claim that the cost-to-charge ratio for procedures received by Medicare beneficiaries is less than the cost-to-charge ratio for the hospital as a whole." In addition, not all hospital expenses were considered allowable Medicare costs in the cost-based reimbursement system Medicare used prior to adoption of PPS. Using a smaller cost (or expense) base in the numerator of the cost-to-charge ratio, will necessarily reduce the imputed cost of Medicare services. Obviously, it will have similar effects on the cost of uncompensated care.

For practical reasons, we recommend defining the cost-to-charge ratio used to impute uncompensated care costs as total hospital espenses divided by gross patient revenue. This ratio can be calculated with little effort as long as gross patient revenue and total hospital expenses are available. More restrictive cost-to-charge ratios could be calculated, but only if more exhaustive cost data are collected and decisions about which costs are allowable costs for uncompensated care are made.

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[15] In principle, this claim can be tested using data on costs and charges from Medicare Cost Reports and information on the charges faced by individual patients covered by different payers. Some states, such as California, collect the latter data on patient discharge records.

6. Should uncompensated care be measured net of state and local government subsidies?

State and local governments provide substantial subsidies to hospitals (see Chapter 1). Most of these subsidies go to public hospitals where it is reasonable to assume that they pay for uncompensated care. Some researchers argue that when comparing uncompensated care levels of not-for-profit and public hospitals, it is appropriate to measure uncompensated care net of state and local government subsidies (Lewin, Eckels, and Roenigk, 1988; Fraser, Narcross, and Kralovec, 1991a and 1991b). While we agree that such offsets are appropriate in the context described above, we believe that data on gross uncompensated care and state and local government subsidies should be collected separately. Treating the two concepts separately would allow better monitoring of access to care by the uninsured and the ability of state and local governments to finance such care. In addition, because most government subsidies go to public hospitals, measuring uncompensated care net of subsidies will have little effect on determining tax-exempt status for not-for-profit hospitals, the second potential use of uncompensated care data. In the third potential use, Medicare or state Medicaid officials would have to decide whether to adjust for government subsidies if standards for disproportionate share payments are based on uncompensated care levels. Of course, they would be able to do so if gross uncompensated care levels and payments from state and local governments were collected separately.

7. Should uncompensated care be measured net of donations?

We do not believe uncompensated care should be measured net of charitable donations. In recent years, such donations have been relatively small

compared to total hospital expenses (Ginzburg, 1991). Moreover, there is no guarantee that donations will be tied to uncompensated care. Finally, if standards for tax exemption or the disproportionate share adjustment are based on uncompensated care net of donations, an implicit tax will be placed on donations.

8, Should Medicaid shortfalls be included in a measure of uncompensated care?

Citing flaws in the usual definition of uncompensated care (bad debt plus charity care), Lewin, Eckels, and Roenigk (1988) proposed a more comprehensive measure which they termed "unsponsored" care. Unsponsored care includes all charity care, the part of bad debt that represents true inability to pay, state or local program payments below cost, Medicaid payments below cost, and community service activities never billed to patients. The expressed purpose of this definition is to measure a hospital's contribution to the community.

For the moment, we will focus on Medicaid payments below cost." In a series of papers, Fraser, Narcross, and Kralovec (1991a, 1991b, and 1991c) trace the growth of Medicaid shortfalls, defined as the difference between Medicaid costs and payments, and uncompensated care'costs between 1980 and 1989." They show that Medicaid shortfalls increased from .9 percent to 2.3 percent of total hospital costs during the decade. Together, Medicaid

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[16]State or local program payments below costs are discussed in our discussion of how to treat state and local subsidies (Issue 6 above). Measuring community benefit is discussed below in Issue 11.

"They define unsponsored care as the difference between uncompensated care and state and local tax subsidies.

shortfalls and uncompensated care, net of subsidies, rose from 4.6 percent to 7.1 percent of hospital costs.

The possibility of Medicaid shortfalls raises two issues closely related to uncompensated care. The first, conceptual issue is whether Medicaid shortfalls (payments less than costs for Medicaid patients) are different than uncompensated care (payments less than cost for private patients). The second issue is empirical: if Medicaid shortfalls are similar to uncompensated care, how are Medicaid shortfalls to be measured? Resolving this issue requires determining whether Medicaid payments are adequate to cover the costs of treating Medicaid patients.

Given our definition (Issue 1) that uncompensated care should measure the hospital's contribution of care to the poor, we agree with Lewin, Eckels, and Roenigk's point that there is little conceptual difference between uncompensated care and Medicaid shortfalls. Thus, to the extent that Medicaid truly underpays hospitals, shortfalls might be included along with uncompensated care in determining a hospital's tax-exempt or disproportionate share status. This still leaves the issue of determining whether Medicaid payments are adequate to cover costs.

Measurement of shortfalls and, in particular, the choice of the cost-to-charge ratio used to convert Medicaid charges to costs is more controversial than the measurement of uncompensated care. The existence of a Medicaid shortfall implies that the state's Medicaid program is not providing adequate reimbursement to cover the program's costs. Yet Federal Medicaid law requires state Medicaid plans to provide payment for inpatient hospital services through reasonable and adequate rates determined by state Medicaid agencies. State Medicaid agencies are unlikely to agree that their rates are inadequate,

causing shortfalls. 'Within this debate, the choice of the appropriate cost-to-charge ratio used for calculating Medicaid costs is crucial. Relatively small decreases in the cost-to-charge ratio can drastically reduce or even eliminate reported Medicaid shortfalls. Medicaid officials will probably argue that certain hospital costs should be excluded from the costs of treating Medicaid patients, thereby reducing the cost-to-charge ratio.

Because of the added complication of determining whether Medicaid payments are sufficient to cover the cost of treating Medicaid patients, we recommend that traditional uncompensated care costs and Medicaid shortfalls not be aggregated in the figures reported by hospitals. There is no reason why they should be aggregated even in standards for tax-exempt and disproportionate share status. In fact, these standards could be based on the amount of uncompensated care costs and the number or percentage of Medicaid patients served. By defining the hospital's share of Medicaid patients in terms of numbers instead of costs, such standards would sidestep the controversial issue of determining whether a hospital is adequately compensated for treating its Medicaid patients. Currently, state and federal standards for disproportionate share status are based on the share of Medicaid patients treated, not on the size of Medicaid shortfalls.

Despite our recommendation, at least one component of Medicaid payment, or rather nonpayment, should be reported as uncompensated care. Treatment for services to Medicaid patients which is not covered by Medicaid should be reported as uncompensated care. Such treatment may be common in states where Medicaid only covers a limited number of inpatient days. An unresolved issue which we will attempt to examine in our interviews with hospitals is whether such care would currently be recorded as uncompensated care or as a contractual allowance to Medicaid.

9. Should Medicare shortfalls be included in a measure of uncompensated care?

Medicare shortfalls raise the same two issues as Medicaid shortfalls: Conceptually, are Medicare shortfalls different than uncompensated care? Empirically, do Medicare shortfalls actually exist? Because there are more Medicare beneficiaries than Medicaid beneficiaries, Medicare shortfalls are potentially greater than Medicaid shortfalls (recall Table 2.1). Moreover, ProPAC (1991b) reports that total Medicare inpatient margins are now negative after six years of the prospective payment system;[18] a recent report (Dobson and Roney, 1992; Health Care Financial Management, 1992) estimates that Medicare shortfalls will total $14.4 billion in 1992, compared to 11.9 billion for uncompensated care (net of government subsidies).

As with Medicaid shortfalls, we believe that Medicare shortfalls are conceptually similar to uncompensated care for purposes that require measurement of a hospital's contribution to the poor, although the comparison is complicated by the fact that many Medicare beneficiaries are not poor. This fact may provide little solace to hospitals who are prohibited from balance billing Medicare inpatients. Consequently, Medicare shortfalls might be included along with uncompensated care in determining a hospital's tax-exempt or disproportionate share status.

All of the problems associated with measuring the adequacy of Medicaid payments also apply to Medicare. Selecting the appropriate cost-to-charge ratio will again be crucial. For example, the Dobson and Roney (1992) study cited earlier uses an overall hospital cost-to-charge ratio to conclude that Medicare pays about 90 percent of its overall costs, while ProPAC (1991) uses

[18] ProPAC's calculations of Medicare's costs are presumably based on a cost-to-charge ratio that only includes Medicare allowable costs. This ratio will generally produce larger margins and smaller shortfalls than the broader cost-to-charge ratio we used to calculate Table 2.1.

a cost-to-charge ratio presumably based on Medicare allowable costs to estimate that Medicare pays about 99 percent of its inpatient costs.[19] There is an additional issue associated with Medicare shortfalls. Because Medicare's current Prospective Payment System is based on a sort of "yard-stick" pricing (Shleifer, 1985), one reason why a hospital may experience a Medicare "shortfall" is because it operates less efficiently than comparable hospitals. PPS is designed to produce this result; consequently, tax-exempt or disproportionate share standards that are based on Medicare shortfalls will act counter to the incentives of PPS.

Given the problems associated with measuring Medicare shortfalls, we recommend that traditional uncompensated care costs and Medicare shortfalls not be aggregated in the figures reported by hospitals.

We note here that Medicare currently treats bad debt incurred by Medicare beneficiaries who do not pay their coinsurance or deductibles as a reimbursable expense. Medicare standards for defining bad debt could be used to define overall uncompensated care in the hospital. Medicare standards specifying how much collection effort a hospital must supply before classifying accounts as bad debt could be used to classify overall uncompensated care in the hospital.

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[19]Dobson and Roney note that "if the overall Medicare hospital payment shortfall is 10 percent and the inpatient shortfall is about 1 percent, then Medicare outpatient revenue must fall well below Medicare costs." In fact, back of the envelop calculations suggest that it would take an unbelievably large Medicare outpatient shortfall to produce a 90 percent overall Medicare shortfall. If the ratio between outpatient and overall hospital gross revenue is the same for Medicare patients as it is for all patients (23.9 percent in 1989, according to American Hospital Association, 1990), Medicare outpatient revenues must cover only about 61 percent of costs. Medicaid officials will dispute the 90 percent figure by arguing for a more limited cost-to-charge ratio, since some hopspital costs are not allowed by Medicare. Medicare allowable costs can easily be five percent less than overall accounting costs.

10. Should contractual allowances to private insurers be included as uncompensated care?

As mentioned, hospital accounting systems record gross revenues on the basis of list charges. Negotiated or mandated discounts are then subtracted as contractual allowances. In the past, Medicare, Medicaid, and Blue Cross were the major sources of contractual allowances. Increasingly, however, hospitals have been granting discounts to health maintenance organizations and preferred provider organizations.

We recommend that contractual allowances between hospitals and private insurers not be included as uncompensated care. Such allowances are negotiated voluntarily; therefore, they make a hospital better off than it would be in the absence of the allowance.

11. Should other "free" care be counted as uncompensated care?

Hospitals currently measure bad debt and charity care for services which have list charges associated with them. Such accounting excludes services such as screening tests and educational classes which some hospitals provide free of charge. Lewin, Eckels, and Roenigk (1988) argue that the cost of such services should be included in their broader measure of unsponsored care, which is designed to capture the community benefit provided by hospitals.

In this report, we have argued for a conceptual measure of uncompensated care that is based on the care provided by the hospital to patients who cannot pay for their care. Given this argument, there are three reasons why we recommend that free care not be added to other sources of uncompensated care. First, there is no guarantee that the free services will actually be provided to patients who cannot afford the services. Although free care to the nonpoor may increase community benefits, it will have no effect on uncompensated care

as we have defined it. Second, even if the community benefit to'the nonpoor is of interest, the type of free care offered may only serve as a type of marketing that for-profit hospitals might be expected to engage in., That is, a hospital might offer free screening tests with the expectation that persons with positive results will be more likely to seek profitable follow-up treatments at the hospital. Finally, because the cost of free care is included in the overall hospital costs used to compute the cost-to-charge ratio, free care will be double-counted if its cost is also included directly as uncompensated care.

Therefore, we recommend that the costs of free care not be added directly into measures of uncompensated care. To the extent that the cost of free care affects overall costs, some of the cost will be incorporated into uncompensated care through the cost-to-charge conversion factor. This conversion imposes the implicit assumption that the fraction of free care provided to poor patients is the same as the overall fraction of care provided to poor patients.

The question of whether overall community benefits, including free services to the nonpoor, should be incorporated within standards for tax exemption is beyond the scope of this report. We will make two points, however. First, we reemphasize the dangers of double counting if the cost of free services (or other community benefits such as education or research) is included directly as a community benefit and again as a component of the cost-to-charge ratio used to compute uncompensated care costs. Second, counting free care towards a community benefits standard implicitly assumes that there are no community benefits from paid care. Economists note that consumers do benefit when they purchase goods and services. Such benefits are known as consumer surplus and are formally defined as the area between the demand curve

and the price. We suspect that the consumer surplus from services that patients buy exceeds the consumer surplus from free care. Equally important, hospitals have no special franchise on consumer surplus; consumers receive consumer surplus from any type of good they buy. Therefore, it does not follow automatically that hospitals deserve tax-exempt status simply because they deliver consumer surplus (community benefit).

12. Is the relevant measure of uncompensated care the dollar amount or the fraction of hospital costs?

Presumably, policymakers are most interested in the amount of uncompensated care provided by hospitals. Other things being equal, however, larger hospitals will provide greater amounts of uncompensated care than smaller hospitals, so policymakers will probably want to consider more than the level of uncompensated care when comparing whether different hospitals are worthy of tax-exempt or disproportionate share status. Looking at the fraction of uncompensated care costs to total hospital costs provides a natural way of comparing the relative burden of uncompensated care borne by different sized hospitals.

We recommend that once hospitals report their uncompensated care charges, the collecting agency should calculate both the uncompensated care costs and the fraction of total costs that this uncompensated care represents. Calculating both figures will not increase hospitals' accounting burdens, since overall hospital costs must be computed in order to calculate the cost-to-charge ratio used to convert uncompensated charges to costs.[20] Let us make one caution, however: basing standards for tax-exempt or disproportion-

[20]The hospital's fraction of uncompensated care costs divided by total hospital costs will be equal to its fraction of uncompensated care charges divided by total hospital charges.

ate share status on the fraction of uncompensated care implicitly assumes there is a linear relationship between a hospital's capacity for uncompensated care and its costs. This issue has not been studied.

13. Should hospitals be reauired to report separate entries for uncompensated care Drovided in inpatient, outpatient, and emeraency room settings?

Our conceptual definition of uncompensated care makes little distinction between care provided to the poor in inpatient, outpatient, and emergency room settings. In practice, however, the distinction may be important because Medicare inpatient and outpatient care are covered under different benefit plans and paid for with different reimbursement systems. Even if Medicare were willing to reimburse hospitals for a share of their inpatient uncompensated care as disproportionate share payments under Part A, it might be reluctant to pay for outpatient uncompensated care. Moreover, cost-to-charge ratios may differ across settings, complicating the conversion from charges to costs if only a hospital-wide cost-to-charge ratio is utilized.

As far as we know, no published study has examined the distribution of uncompensated care across inpatient and outpatient settings. To evaluate whether it is possible to distinguish between uncompensated care provided in the two settings, we will ask hospitals whether their accounting systems can and do distinguished between settings (Chapter 3). We will also examine whether state agencies which collect information on uncompensated care require hospitals to distinguish between inpatient and outpatient settings (Chapter 4).

In distinguishing between inpatient and outpatient uncompensated care, a key question is how hospitals classify uncompensated care received by emergency room patients. Is such care always included as outpatient uncompensated

care? If the patient is subsequently admitted as an inpatient, are the emergency room charges classified as inpatient uncompensated care? Or are they classified as outpatient care? Our survey of hospital administrators should give us some idea of how emergency room uncompensated care is classified.

14. Will hospitals respond to changed reporting reauirements for uncompensated care?

Almost certainly, if reported levels of uncompensated care are used to determined tax assessments or disproportionate share payments. Hospitals may respond both by reclassifying bad debt as charity care and by increasing overall uncompensated care. Reclassification will probably be the largest response if only charity care is used in standards for tax-exemption or disproportionate share status. Although hospitals currently have incentives to keep track of paid and unpaid bills, they have less incentive to divide unpaid bills into bad debts and charity care. The incentive to label the bill as charity care will clearly increase if charity care is tied directly to taxes or reimbursement.

Because of the incentive to reclassify bad debt as charity care, we recommend that efforts to tie tax-exempt or disproportionate share status to charity care alone should set prospective standards. This will allow hospitals to respond to the new incentives for classifying bad debt and charity care.

Standards for tax-exempt status and disproportionate share hospitals will probably have some positive effect on the overall sum of bad debt and charity care, since the marginal return from collection efforts, net of tas liabilities and disproportionate share payments, will fall. The effect will

be limited as long as a $1 increase in uncompensated care leads to less than a $1 increase in disproportionate share payments or a $1 decrease in tax liabilities. However, if hospitals must surpass a threshhold level of uncompensated care to avoid facing a discontinuous increase in taxes or reduction in disproportionate share payments, they may increase overall uncompensated care considerably. For example, suppose a not-for-profit hospital has $50 million in costs, provides $1 million in uncompensated care and would face a tax liability of $4 million if it did not have tax-exempt status. The hospital currently provides 2 percent of its costs as uncompensated care. If legislation is passed requiring hospitals to provide 6 percent of its costs as uncompensated care in order to qualify for tax exemption, the hospital wil have a strong incentive to increase uncompensated care to $3 million. This $2 million increase will result in a $4 million drop in tax liability.

We recommend that policymakers carefully consider the design of standards for tax-exempt or disproportionate share status. Policies that produce large discontinuous payoffs to increasing or decreasing overall uncompensated care levels should probably be avoided.

An unresolved issue is how much hospitals will respond to changed incentives for reporting uncompensated care levels. We will attempt to address this issue in the next chapters as we discuss the incentives hospitals currently face for reporting uncompensated care.

CHAPTER 3. INTERVIEWS WITH HOSPITAL ADMINISTRATORS

Although many states collect detailed information on facility-specific amounts of charity care and bad debt, these figures may not be comparable between states (because of different guidelines for charity care and bad debt definition) or even between hospitals within the same state (because of a lack of strong guidelines). In an effort to determine exactly what information on uncompensated care hospitals can provide, we spoke with hospital administrators in Tennessee, Florida, and Massachusetts. Although time and funding constraints prevented us from conducting a true random survey of hospitals, we did try to cover a "spectrum" of facility types by selecting hospitals of different control types (not-for-profit, for-profit and government), of different sizes and teaching status (based on bedsize and Council of Teaching affiliation) and in different types of location (urban, semi-urban and rural).

We preface our discussion by noting that our interviews asked how hospitals keep track of un compensated care. We lacked the authority to formally audit hospital records to determine how well hospitals keep track of charges to uncompensated care patients. To partially address these questions, we asked the administrators to evaluate their data collection efforts. We also asked officials in state data collection agencies to assess how well hospitals keep track of uncompensated care (see Chapter 4). While these self-assessments cannot be accepted with complete confidence, it is worth emphasizing the obvious: hospitals have strong incentives to collect what they are owed (preventing excessive levels of uncompensated care) and to 'avoid spending collection efforts on people who cannot pay (giving them incentives to

distinguish, at least internally, between bad debt and charity care). Given this qualification, the following paragraphs discuss some of our findings.

The degree of care used to assess charity care and/or bad debt levels can differ widely between hospitals, especially in those states which do not make explicit requirements on hospitals to "prove" the eligibility of those cases they report as charity. While some hospitals have instituted sophisticated collection systems complete with financial counselors (case workers, medical advisors) to interview all patients and to aid them in applying for the available financial assistance (Medicaid, county assistance), others make little, if any, formal attempt to counsel the patient as to his viable options. It is also evident that there is some difference in the ability of the hospitals to maintain accurate records; while some hospitals (especially those associated with larger corporations and chains) boasted fairly sophisticated accounting software, most did not, and a few hospitals even reported keeping records at least partially by hand.

The presence of state guidelines for determining charity care amounts appears to improve the care and time taken to produce these figures. The state of Massachusetts maintains a Department of Medical Security which conducts regular audits of each facility's patient accounting to assure accurate "free care" assessments.[21] A Massachusetts hospital with approximately 300 beds reported that they maintain several full-time personnel in order to make the proper “free care" assessments and to fulfill the state's monthly reporting requirements. Florida hospitals are required to produce documented proof that each charity care case had income less then 150 percent

[21]The state of Massachusetts maintains an indigent care risk pool in which hospitals are required to participate.

of the poverty line in the last twelve months.[22] While such systems should improve the quality and comparability of data on charity care and bad debt, the additional data collection effort is not without significant cost both to the state and to the individual hospitals. Hospitals in both Massachusetts and Florida emphasized the time-intensive nature of producing accurate information on charity care levels.

Another possible incentive for producing accurate estimates of charity care amounts stems from the intended use for the figures. In the state of Massachusetts, reported free (charity) care amounts are used to determine whether each hospitals is required to pay into the free care pool or whether it will receive money back. Both Tennessee and Florida use reported charity care amounts in determining the amount of Medicaid disproportionate share payments. In Tennessee, total uncompensated care (charity care plus bad debt) is used in determining a threshold which hospitals must exceed to be eligible for Medicaid disproportionate share payments. Uncompensated care amounts are also used in determining actual payments to the hospitals. In Florida, reported charity care amounts are used in determining eligibility for Medicaid disproportionate share payments. Actual payments are determined by a formula which considers charity care patient days, Medicaid patient days, total patient days and total revenues. A charity care patient day is "worth" 4.5 Medicaid patient days in the formula which calculates the payment; this extra compensation is designed to take into account that hospitals receive at least

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[22]The following documents constitute proof of income in the state of Florida: 1) W-2 forms, 2) Pay stubs, 3) Income tax returns, 4) Forms approving or denying unemployment compensation or worker's compensation, and 5) Written verification of wages from an employer. There is one exception to the 150% of poverty line rule: if total charges exceed 25% of annual income, the charges may be classified as charity care if total income does not exceed four times the poverty line amount for a family of four.

some reimbursement for Medicaid patients, while they receive little, if any, reimbursement for their charity cases. Florida also maintains county-level programs to reimburse hospitals for charity care under the amended Health Care Responsibilities Act (HCRA) of 1988. This act was instituted in 1977 to prevent "dumping" of patients between counties, but was expanded in 1988 to require all'counties to reimburse certain charity care amounts. Hospitals which provide more than 2 percent of net revenue in charity care (as defined by Florida's Health Care Cost Containment Board, the state agency which collects financial information on hospitals) qualify for HCRA payments for charity care. In addition, hospitals which can demonstrate that a significant amount of their charity care cases originate in other counties can demand payment from other county governments (the "anti-dumping" clause).

The hospital administrators interviewed were asked a number of questions concerning their ability to track individual patient accounts, to distinguish between charity care and bad debt and to classify uncompensated amounts into inpatient vs. outpatient amounts. In addition, the administrators were asked to describe their present accounting systems and to indicate whether their hospital had instituted any major accounting changes in this area (of measuring uncompensated care) in the last five years. Finally, these administrators were asked to describe how their system would classify the following "difficult" cases:

a. A person with insurance coverage up to $50,000 that ends up with a bill well in excess of that amount.

b. A person with a 20% coinsurance rate that runs up a substantial bill, and is, therefore, unable to pay his coinsurance amount.

Two of the six Tennessee hospitals interviewed reported that they made no attempt to determine a priori whether a patient would be considered a charity care case. One of these hospitals was a for-profit hospital which provides only a minimum of uncompensated care; because this hospital does not qualify for any reimbursement of charity care amounts, it has no incentive to distinguish 'between bad debt and charity care, and thus, simply tries to minimize both of them. The other hospital which reported no initial assessment maintained a rather unique (and fairly accurate) system for assessing charity care and bad debt amounts. When a not-for-profit organization purchased this facility from the county government a number of years ago, it made an agreement with the county to provide a certain percentage of revenue in charity care to residents of the county. The determination of whether a case may be considered charity or not is left to two collection agencies. Thus, the hospital must make an effort to collect every account whether or not the patient has an ability to pay. After a six month period, the account is turned over to one of the collection agencies who, based on income/asset assessments, determine whether the account should be written off to charity or not. The agencies report this information back to the hospital for its records.

The other four Tennessee hospitals reported some form of ability-to-pay assessment upon patient admission. Of these four, two facilities reported fairly comprehensive assessments conducted by financial counselors/case workers. These hospitals also indicated that a patient may apply for re-assessment at any point in the billing process, should his financial situation change. Both hospitals placed some confidence in the accuracy of their charity care and bad debt figures. The other two hospitals indicated that

their systems were not able to make good distinctions between charity care and bad debt because there was no room for reassessment in the system or because the hospital was unable to obtain the necessary financial information from the patient to make a proper distinction. Administrators seemed more confident in their aggregate accounting of uncompensated care than they were of the separate classifications of bad debt and charity care.

The Massachusetts hospital and the Florida hospital both indicated that they maintained well-structured systems of assessment for all patients treated. Both facilities admitted that the most difficult-to-classify cases were those patients treated in the emergency room. Many indigent patients seek primary and tertiary care through the ER; while these are, perhaps, the most likely candidates for charity care, they are also the ones who usually lack the appropriate documentation necessary to apply for charity care status.[23] The Florida hospital maintained that it was unable to claim a number of cases as charity care because the indigent victim died in the hospital before they were able to obtain any information about him.

All of the hospital administrators interviewed indicated that the ability to distinguish between inpatient and outpatient charity care and bad debt was possible under their accounting systems, at least "in theory". However, many of the administrators felt that the distinction between outpatient charity care and outpatient bad debt was not meaningful because the majority of uncompensated outpatient care usually fell under the category of bad debt; most hospitals require some proof of ability to pay before providing

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[23]Patients receiving primary or tertiary care in the ER are likely to have lower charges than patients subsequently admitted to the hospital.

emergency room has traditionally been a major source of indigent care, the presence of this third category may make comparisons of inpatient and outpatient amounts difficult; some hospitals may divide emergency room amounts between inpatient and outpatient amounts, while others may maintain the separate category. In addition, a number of the hospitals indicated that if the emergendy room patient was admitted before midnight of the same day that he came into the ER, all of the ER charges were rolled into his inpatient account. Another hospital indicated that if the patient were admitted at any point subsequent to his emergency room visit, his ER charges would be rolled into his inpatient account. One practical solution to this comparability problem would be to combine all ER charges with inpatient charges before assessing level of charity care and bad debt; unless a particular ER serves as primary care center for a large number of indigent people, charges for patients that are treated and released are often relatively small compared to the charges for cases admitted.

As discussed earlier, there appears to be a wide range of accounting systems in use by the hospitals interviewed. While most facilities maintain computerized systems, two of the Tennessee hospitals reported systems which produce a significant portion of their figures by hand. Further reporting requirements for charity care could impose significant hardships on hospitals which do not maintain versatile accounting software packages. One large urban hospital planned to install a new system in June; significantly, this hospital has seen charity care fall as a proportion of overall uncompensated care, even though overall uncompensated care has risen. The hospital administrator did not believe his current accounting system accurately measures the amount of charity care being provided.

Several hospitals also indicated that there had been major changes in their accounting for uncompensated care. Several Tennessee hospitals noted that the classification of unreimbursed Medicaid charges was changed two years ago when the state Medicaid program changed its coverage. Prior to the change, Medicaid paid a per diem rate for inpatient days, up to a limit of 28 days per incident. After 28 days, the patient was no longer covered. Charges for Medicaid patients whose length of stay exceeded 28 days were categorized by some hospitals as charity care and as Medicaid contractual allowances by other hospitals. Recently, however, Medicaid agreed to reimburse hospitals for patient days beyond the 28-day limit, albeit at a significantly reduced rate. Due to the change in reimbursement policy, hospitals must nov classify shortcomings in Medicaid payments (beyond the 28-day limit) as contractual allowances, not as charity care (as they may have been originally classified), because the hospital receives at least some small amount of reimbursement for those days. Another hospital indicated that there had been other significant changes in their accounting for charity care within the last five years: three years ago the hospital was purchased from the county governmen: by a not-for-profit group. The administration of the hospital now relies on the assessments of two outside collection agencies to determine its level of charity care and bad debt.

Changes in accounting for charity care and bad debt make comparisons across years more difficult Examining patterns of charity care and bad debt separately must, at a minimum, take into consideration major changes within the state that may affect the classification of patient charges. A more accurate analysis would investigate changes in accounting patterns which may have resulted from a change in ownership status. During the period from 1980

to 1990, 42 Tennessee hospitals reported a change in ownership status. It is entirely conceivable that such ownership changes also resulted in significant accounting changes.

Administrators were also asked how two "difficult" cases (see page 4) would be classified. Three of the six Tennessee hospitals interviewed indicated that these charges would fall under charity care; patients in these hospitals have the right to be reassessed at any point during the billing process. The other three hospitals indicated that these cases could very well end up in bad debt. The Florida hospital said that these cases could be classified as charity or bad debt, depending on the income of the family for the past 12 months. If the patient had sufficiently high income during the last 12 months, he would never be eligible for charity care. The Massachusetts hospital indicated that these patients would, in all likelihood, be eligible for partial free care (up to 60 percent of the total bill) with a payment plan to cover the rest.

Discussion with these hospitals indicated that some caution must be taken when examining the available data on charity care and bad debt. A number of economists advocate using only uncompensated care (charity care plus bad debt) when comparing hospitals because of the numerous problems associated with distinguishing between the two separate measures. It appears that it may be possible to examine charity care and bad debt separately in those states where guidance by state agencies is significant. More caution must be used when examining data from those states where reporting is not closely monitored by the state. When examining data from states like Tennessee, researchers must be careful to take into consideration that comparability may be impaired by accounting differences between hospitals.

CHAPTER 4. EXISTING DATA SETS

In this chapter, we examine existing data sets on uncompensated care at the hospital level to evaluate whether the data overcome the definitional and measurement problems identified in Chapter 2. We first discuss the advantages and disadvantages of two national data sets that include hospital finances, Medicare Cost Reports and the American Hospital Association (AHA) Annual Survey of Hospitals. Because the Medicare Cost Reports lump together contractual allowances to payers with bad debt and charity care, the source does not currently provide useful information on uncompensated care. The AHA Annual Surveys are a more promising data source, since hospitals voluntarily report the amounts of bad debt and charity care they supply. These data have important limitations, however. Hospitals voluntarily choose to respond to the survey; while overall response rates are high, response rates fall dramatically for revenue and cost questions, particularly for for-profit hospitals. As with any voluntary survey, it is unclear whether hospitals have strong incentives to respond accurately to questions about uncompensated care. Finally, the financial sections of the Annual Surveys are considered confidential and are not released to the public.

State planning and Medicaid agencies appear to offer a rich set of data on uncompensated care. Many of these agencies collect detailed information on uncompensated care; in most cases, the agencies also collect information on contractual discounts by type of payer. An important advantage of these data sources is that they yield a complete picture of the uncompensated care provided by all hospitals in a state.

To determine whether state data collection systems appropriately measure uncompensated care, we formally evaluate the quality of data on uncompensated care collected by state hospital agencies in Florida and Tennessee. We chose these states for the analysis because we already possessed their annual cost reports for the years 1980 to 1990. We first describe the instructions hospitals are given for filling out each state's forms. The instructions give hospitals guidance in distinguishing between the various components of uncompensated care. We then examine whether charity care and bad debts are consistently reported, if most hospitals completely answer the relevant sections of the cost report (i.e., are missing values rare?), and whether bad debt and charity care levels are comparable across periods for individual hospitals. Finally, we discuss the incentives hospitals have for distinguishing between bad debt and charity care in each state. These incentives may be stronger than in the AHA survey because states may use information on charity care to determine tax-exempt status, regular and disproportionate share Medicaid payments, or certificate of need approval.

We provide a brief description of the data collected by other state agencies and the purposes for which that data is used. To get an idea of the problems associated with collecting uncompensated care data, we talked with officials in a number of state data collection agencies. We asked the officials to explain how they define bad debt and charity care, what documentation of uncompensated care they require hospitals to provide, and how the data they collect are used.

A. Medicare Cost Reports

Medicare Cost Reports are the primary source of cost and financial data collected for the Medicare program. They provide useful information about cost-to-charge ratios which could be used to convert uncompensated care charges to costs. Unfortunately, the costs reports provide almost no breakdown on revenues and deductions from revenues by payer source. Patient revenue is reported for all patients, and deductions from revenue are only reported at the aggregate level. The deductions include contractual allowances for Medicare, Medicaid, and private payers, as well as bad debt and charity care. Because of the aggregation, these data yield no information about the amount of uncompensated care provided by a hospital.

Given their otherwise detailed financial information, Medicare Cost Reports appear to be an ideal instrument for collecting uncompensated care data. The Omnibus Budget Reconciliation Act of 1987 required HCFA to conduct a demonstration project where hospitals would be required to submit an enhanced Medicare cost report containing additional financial information. Additional information to be collected includes hospital discharges, patient days, inpatient and outpatient charges and revenues, all classified by payer, as well as bad debt and charity care (Commerce Clearing House, 1991). Such information, which is routinely collected by state agencies but has never been collected by Medicare, would make Medicare cost reports a useful source for research on uncompensated care and hospital cost-shifting. The demonstration project should provide important additional evidence about hospitals' ability to report accurate information on uncompensated care.

B. American Hospital Association Annual Surveys[24]

The AHA Annual Surveys ask hospitals a comprehensive series of questions on organizational structure, facilities and services, utilization, personnel, and medical staffing. For our study, the first three categories in the section on financial data are of interest. With two possible exceptions, the questions and instructions in this section are written clearly and concisely and could serve as a guide if HCFA decides to begin collecting uncompensated care data. The questions are based on the principles outlined in the American Institute of Certified Public Accountants' (AICPA) Audits of Providers of Health Care Services (1990).

The first category in the section, The Statement of Revenues and Expenses of General Funds, shows net patient revenues and expenses. Three components of this category are of importance for measuring uncompensated care. First, net patient service revenue is defined as the net realizable patient revenue. Thus, this entry reflects revenue net of contractual allowances. This follows the 1990 AICPA ruling that the previous practice of reporting hospital revenue at billed charges was no longer appropriate. Second, tax appropriations are prominently labeled as other revenue. This should make it easier to calculate uncompensated care net of tax subsidies, since the main complication in this calculation is identifying the subsidies. Third, bad debt expense is listed as a nonpayroll expense. This corresponds with the 1990 AICPA ruling that bad debt, but not charity care, is a normal business expense.

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[24]For this section, we benefitted from conversations with Peter Kralovec and Irene Fraser, Directors of the Hospital Data and the Division of Ambulatory Care, respectively, at the American Hospital Section. However, the conclusions reached in this section are our own.

The second category, Detail of Patient Service Revenue, follows the traditional practice of valuing gross revenue and deductions from revenue at the hospital's full established rates. The deductions from revenue include contractual allowances by payer type, charity care, and self-pay adjustments. The instructions clearly define charity care as resulting from the hospital's policy to provide health care services free of charge to individuals who meet certain financial criteria. This care is to be valued at established rates. Two components within this category may confuse hospital administrators filling out the survey. First, bad debt no longer appears in its traditional place as a deduction from revenue. As mentioned, bad debt now appears as an expense. Moreover, bad debt is not well-defined in the instructions as the value of care provided to people who can pay, but do not. Second, self-pay adjustments are not defined. It's not clear how this entry differs from charity care. AHA officials indicate that this entry did cause confusion in the 1990 survey and was dropped from subsequent surveys.

The third category of interest, Sources of Patient Revenue, divides hospital gross revenue (valued at established rates) by payer source. This information, coupled with the previous section's list of deductions, could be used to compute Medicaid and Medicare shortfalls, as well as to study the issue of cost-shifting.

Aside from the completeness of the data, the AHA surveys have the additional advantage of being the only comprehensive nationwide source of data on uncompensated care. Balanced against these advantages are three limitations:

1. Voluntary responses
2. Potential lack of consistency between hospitals

3. Confidentiality

For a voluntary survey, the AHA enjoys relatively high response rates. AHA officials estimate that 80 to 90 percent of all hospitals answer the survey. Response rates for individual questions, particularly regarding revenues and finances, are lower. For questions where a hospital does not respond, the AHA uses average values for similar hospitals to impute missing values. Uncompensated care values need to be imputed for about 25 percent of hospitals (Ashby, 1991a). Nonresponse rates are especially high for for-profit hospitals, with about 60 percent of these hospitals requiring imputation. Consequently, Lewin, Eckels, and Roenigk (1988) have argued that the AHA data are not appropriate for comparing uncompensated care levels between for-profit and not-for-profit hospitals.

Although the AHA data are quite useful for tracking national and state trends in uncompensated care, the imputations may complicate analysis of the amounts of uncompensated care in smaller areas, such as metropolitan areas, and the amount of uncompensated care provided by individual hospitals over time. Such analysis could be useful in determining whether a hospital bears a disproportionate share of the uncompensated care in a region and how hospitals vary their uncompensated care in response to changes in policy.

Because the survey is voluntary, hospitals classify bad debt and charity care according to their internal definitions. As Chapter 3 suggests, self-classification may lead to inconsistencies in the mix between bad debt and charity care at different hospitals. Such inconsistencies may be inherent in the measurement of uncompensated care: AHA officials indicate inconsistencies even for individual hospitals over time, with some hospitals reporting all bad debt and no charity care one year, and no bad debt and all charity care the

next year. Consequently, AHA studies generally report uncompensated care totals, with no breakdown between bad debt and charity care.

Confidentiality is the third major limitation of the AHA data. In order to get hospitals to reveal financial information, the AHA agrees not to release the information without the written permission of the hospital. While the confidentiality provision is understandable, it limits the usefulness of the AHA data to outside researchers studying uncompensated care. The AHA has cooperated with government agencies like ProPAC in the past by performing analyses on the AHA premises.

C. Florida Data

Florida's Health Care Cost Containment Board has required hospitals to complete a detailed survey on hospital finances each year since 1980. The survey covers hospital type, ownership, services offered, utilization, costs, revenues, and financial statements such as the balance sheet and income statement. For purposes of esamining uncompensated care, the most important parts of the survey are the "Statement of Patient Care Services Revenue by Payor Class," the "Statement of Patient Care Services Expense," and the "Statements of Other Operating and Nonoperating Revenues and Expenses." The first of these statements includes revenues and deductions from revenue for public and private insurers[25], and deductions for bad debt, charity care for Hill-Burton patients, and charity care for other patients. This statement provides the basic information on uncompensated care and can be used to

"Prior to 1990, only data on deductions by payer and total patient revenue were collected. Without data on revenue by payer, it is not possible to calculate Medicare or Medicaid shortfalls for these years.

compute the ratio of uncompensated care to total patient charges. The other statements are necessary for computing the hospital's cost-to-charge ratio.

Type and Definition of Information Collected

In Florida, the distinction between charity care and bad debt is important for policy purposes, Since 1988, Florida has provided clear guidelines about what constitutes charity care (State of Florida Health Care Cost Containment Board, 1991). Charity care is now defined as

> "the differential between the amount, based on the hospital's full established rates, of bills for hospital services to charity/ uncompensated care patients and the amounts to be received on behalf of patients (including amounts received from voluntary agencies or government agencies on behalf of specific indigent patients) in payment for such services. Each hospital will determine which patients are charity/uncompensated care patients by a verifiable process subject to the following provisions: No patient will be considered a charity/uncompensated care patient whose family income as applicable for the 12 months preceding the determination exceeds 150 percent of the current Federal Poverty Guidelines unless the amount of hospital charges due from the patient exceeds 25 percent of the annual family income. However, in no case shall the hospital charges for a patient whose family income exceeds 4 times the Federal Poverty Level for a family of four be considered charity."

Consistency

To evaluate the quality of the Florida data, we examined overall trends in state uncompensated care, as well as the consistency of the data reported by individual hospitals. Figure 4.1 shows the trend for uncompensated care in short-term care hospitals in the state between 1980 and 1990, while Figure 4.2 shows uncompensated care costs as a fraction of total hospital costs. The latter trend is consistent with the national trend reported by the American Hospital Association (see Chapter 1) and with trends in state Medicaid spending, a partial substitute for uncompensated care.

To evaluate the consistency of individual hospital reporting, we checked:

Fig. 4.1. Uncompensated care costs, Florida, 1980-90

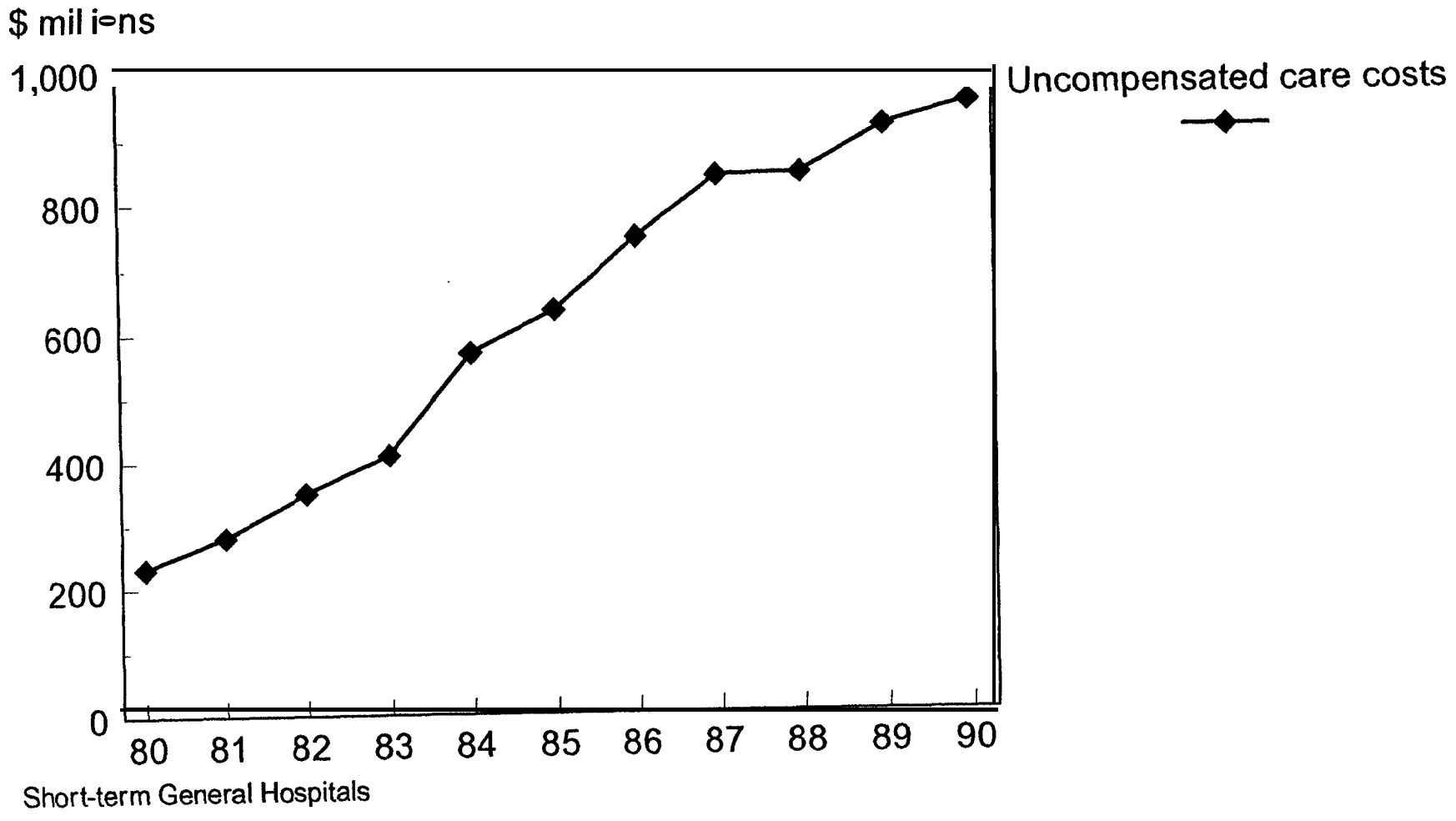
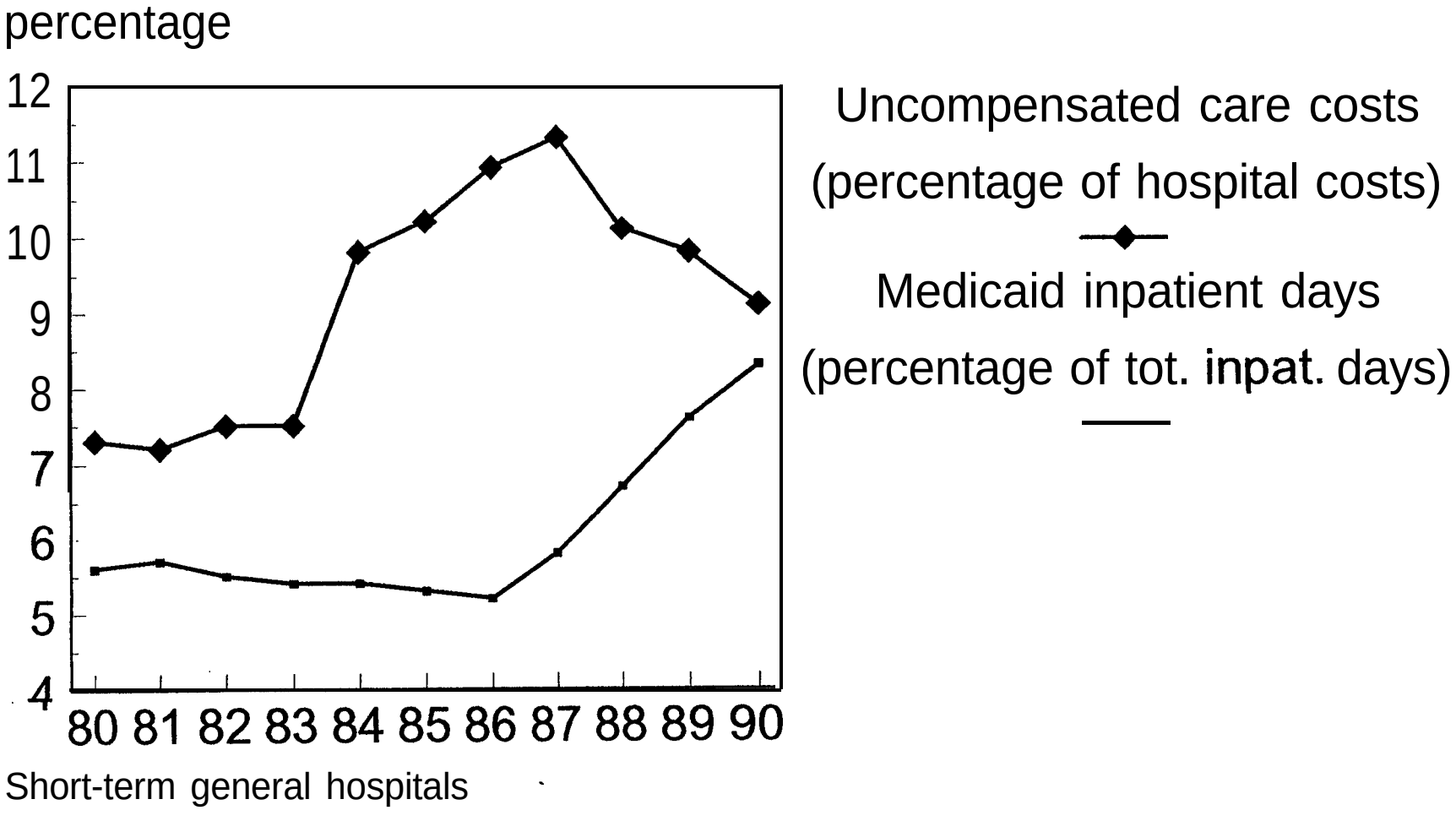


Fig. 4.2. Uncompensated Care and Medicaid Share, Florida, 1980-90



1. Whether the hospital's total uncompensated care (bad debt plus charity care) experienced little fluctuation between 1980 and 1990, given the state trend and the hospital's share of Medicaid inpatient days.

2. If the relative shares of bad debt and charity care changed appreciably during the period.

3. How often missing values were reported for bad debt or charity care.

Overall, uncompensated care appeared to fluctuate little within a hospital. Only about 10 percent of the 210 Florida short-term hospitals reported substantial fluctuation in uncompensated care, where "substantial" is defined subjectively as at least a 5 percentage point annual change in uncompensated care. Because of the subjective nature of this definition, fluctuations were most likely to be noticed at small hospitals or hospitals that provided large (greater than 15 percent) shares of uncompensated care. The fact that uncompensated care totals for an individual hospital did not bounce wildly around from year to year suggests that hospitals report their uncompensated care totals fairly consistently. Observed fluctuations could represent real changes in the amount of uncompensated care which resulted from changes in hospital mission, changes in ownership, or the growth of new hospitals.

Compared to fluctuations in total uncompensated care, there seemed to be much greater annual variation in the relative shares of bad debt and charity

care reported by a hospital. This suggests that hospitals may face difficulties in distinguishing between bad debt and charity care. In addition, a number of hospitals reported relative shares of bad debt and charity care which "flip-flopped" during the period. For example, a hospital might report average values of 10 percent and 5 percent for bad debt and charity care during the period 1980 to 1985 compared to average values of 5 percent and 10 percent, respectively, during 1986-1990. A probable explanation for such flip-flops is that the hospital changed its internal definitions of bad debt and charity care during the period. Overall, such changes tended to increase the size of charity care relative to bad debt; on average, bad debt was two and a half times larger than charity care in 1985, but only twice as large in 1990.[26]

Response rates for uncompensated care were exceptionally good for short-term general hospitals. Fewer than 10 missing values on bad debt were reported during the entire 11 year period. Missing values were much more common for charity care; over 20 percent of possible responses were missing values during the period. However, about 75 percent of the missing values were reported by for-profit hospitals, which have obvious incentives to not provide charity care. Moreover, for all types of hospitals, missing values for charity care appear to have little effect on overall levels of uncompensated care. When a hospital with a missing value for charity care in one year does report charity care for other years, the reported values are generally

[26]These comparisons are based on an unweighted average of bad debt to charity care. Thus, each hospital's mix has equal weight in the comparison. If hospitals' bad debt to charity care ratios were weighted by the hospital's share of uncompensated costs in the state, the mix of bad debt to charity care would be much closer to one, since hospitals providing large amounts of uncompensated care provide disproportionately larger amounts of charity care than bad debt.

less than one percent of total revenue. In other cases, bad debt rises in years when charity care is missing, so that the sum of bad debt and charity care changes little over time.

Use of Data

Given the quality of the Florida data, it is worth investigating both the incentives hospitals face in reporting uncompensated care totals and the procedures the Health Care Cost Containment Board uses to ensure that hospitals answer their survey accurately. To examine these issues, we talked to state officials at the Health Care Cost Containment Board, Medicaid, and the Public Medical Assistance Trust Fund, as well as an administrator at a Florida hospital.

Florida hospitals have several direct financial incentives for reporting uncompensated care. First, all hospitals pay a percentage of their net operating revenue into the state's Public Medical Assistance Trust Fund, which is used to obtain federal matching funds for the state's Medicaid program. Since a hospital's assessment is based on net, rather than gross revenue, hospitals have a strong incentive to identify deductions from revenue, such as uncompensated care. Second, Medicaid disproportionate share payments are based, in part, on the amount of charity care provided by the hospital. Finally, charity care is used as a screen for qualifying for payments from county governments under provisions of the state's Health Care Responsibility Act. This act is designed to make county governments responsible for paying for the care their indigent citizens receive at out-of-county hospitals.

A fourth potential incentive for reporting uncompensated care arises because Florida's Certificate of Need (CON) program requires hospitals to include information on uncompensated care when they apply to expand their

facilities. Campbell and Fournier (1991) suggest that there may be a "quid pro quo" relationship between indigent care and certificate of need approval; in the case of profitable new services, regulators may look more approvingly upon CON applications from hospitals that provide (and report) large amounts of uncompensated or charity care. They find some evidence that hospitals with greater levels of charity care are more likely to apply for and receive CON approval.

Documentation

The state requires that hospitals provide, upon request, documentation for all charges reported as charity care. Such documentation is limited to one of the following:

1. W-2 withholding forms.
2. Pay stubs.
3. Income tax returns.
4. Unemployment or workers' compensation forms,
5. Written verification of wage from employer.
6. Written verification of income from public welfare agencies.
7. A witnessed statement from the patient.
8. A Medicaid voucher stating that the patient's Medicaid benefits have been exhausted.

Patients without appropriate documentation or with incomes exceeding the qualifications are to be reported as bad debts.

Aside from requesting documentation of charity care cases, Florida's Health Care Cost Containment Board runs the hospital's financial statements

through a series of consistency checks (i.e., do the numbers add up? do the totals match on corresponding pages?) and validity checks (i.e., is the reported figure greater than 10 percent above the mean for all hospitals or 10 percent greater than the hospital's level last year?). If any flag comes up during this process, the hospital may be subject to a full audit.

Florida's detailed distinction between charity care and bad debt and its documentation requirements are probably largely responsible for the quality of its data on uncompensated care. Such distinctions and requirements also bear a cost. The hospital administrator we spoke with reported employing several caseworkers whose job was to acquire documentation. Moreover, in some cases the hospital was unable to collect documentation before the patient died.

Discussion

In the case of Florida, it appears possible to collect fairly good data on uncompensated care at the individual hospital level. A hospital's total uncompensated care generally moves predictably from year to year with few unexpected fluctuations. Distinguishing between bad debt and charity care appears more problematic, with many hospitals apparently changing their definitions, and therefore the mix, of bad debt and charity care during the period. Missing values are not a major problem; they appear to represent zero values.

D. Tennessee Data

Tennessee's Department of Health Statistics and Information collects Joint Annual Reports from each hospital in the state. The reports are similar in overall content to the Florida data.

Type and Definition of Information Collected

Tennessee divides uncompensated care into three major categories: bad debt, charity care, and medically indigent. The primary distinction between charity care and medically indigent is the patient's income; patients with incomes less than 100 percent of the federal poverty guidelines qualify for charity care, while patients who cannot pay their bills and have incomes between 100 and 150 percent of the federal poverty level can be classified as low income medically indigent. In addition, a person can be classified as "other medically indigent" after the hospital has made a reasonable determination that the patient cannot pay all or part of the hospital bill and that the patient does not satisfy the income requirement for low income medically indigent status, is not eligible for state or federal programs, and has no or inadequate health insurance.

Two other characteristics of the Tennessee data are worth noting. First, Tennessee asks hospitals to subdivide each component of uncompensated care into inpatient and outpatient settings. This provides an opportunity to observe whether hospital accounting systems can distinguish between the two settings. Although we cannot tell how accurately uncompensated care is sorted into each setting, we can examine whether hospitals use the two settings or simply lump all of bad debt or charity care into a single category. Second, besides the individual entries for inpatient and outpatient care for the categories bad debt, charity care, medically indigent low income, and medically indigent other, hospitals also report subtotals for each category. Additional subtotals for all medically indigent care and all uncompensated care are also reported. This is important because some hospitals only report figures for the subtotals. For example, some hospitals may report a subtotal

for bad debt, but not report figures for inpatient and outpatient bad debt. Other hospitals may report the subtotal for all uncompensated care, but not report separate figures for each category of uncompensated care. Such cases provide indirect evidence about the ability of hospital accounting systems to distinguish between different types of uncompensated care.

Consistency

Figure 4.3 plots uncompensated care costs and Figure 4 4 tracks the ratio of uncompensated care costs to total hospital costs in Tennessee between 1980 and 1990 as calculated from the Joint Annual Reports." Uncompensated care in Tennessee largely follows the trends in Florida and the nation, rising as a percentage of hospital costs during the first half of the decade, while falling in the second half. The absolute level of uncompensated care actually fell slightly between 1989 and 1990.

Figure 4.5 presents two measures of the ratio between charity care (including medically indigent) and bad debt costs. One measure shows the average of charity care to bad debt with all hospitals equally weighted. The second measure of the ratio is a weighted average, where the weights are given by the hospital's uncompensated care costs. The weighted average is greater than the unweighted average because hospitals providing large amounts of uncompensated care have higher than average ratios of charity care to bad debt. Both measures of the ratio are of policy interest. The unweighted average indicates that most hospitals report greater levels of bad debt than charity care. If standards for tax exemption are based solely on charity

"Tennessee could not provide a tape of the 1986 Joint Annual Report; therefore, this year is omitted from the analysis.

Fig. 4.3. Uncompensated Care Costs, Tennessee, 1980-90

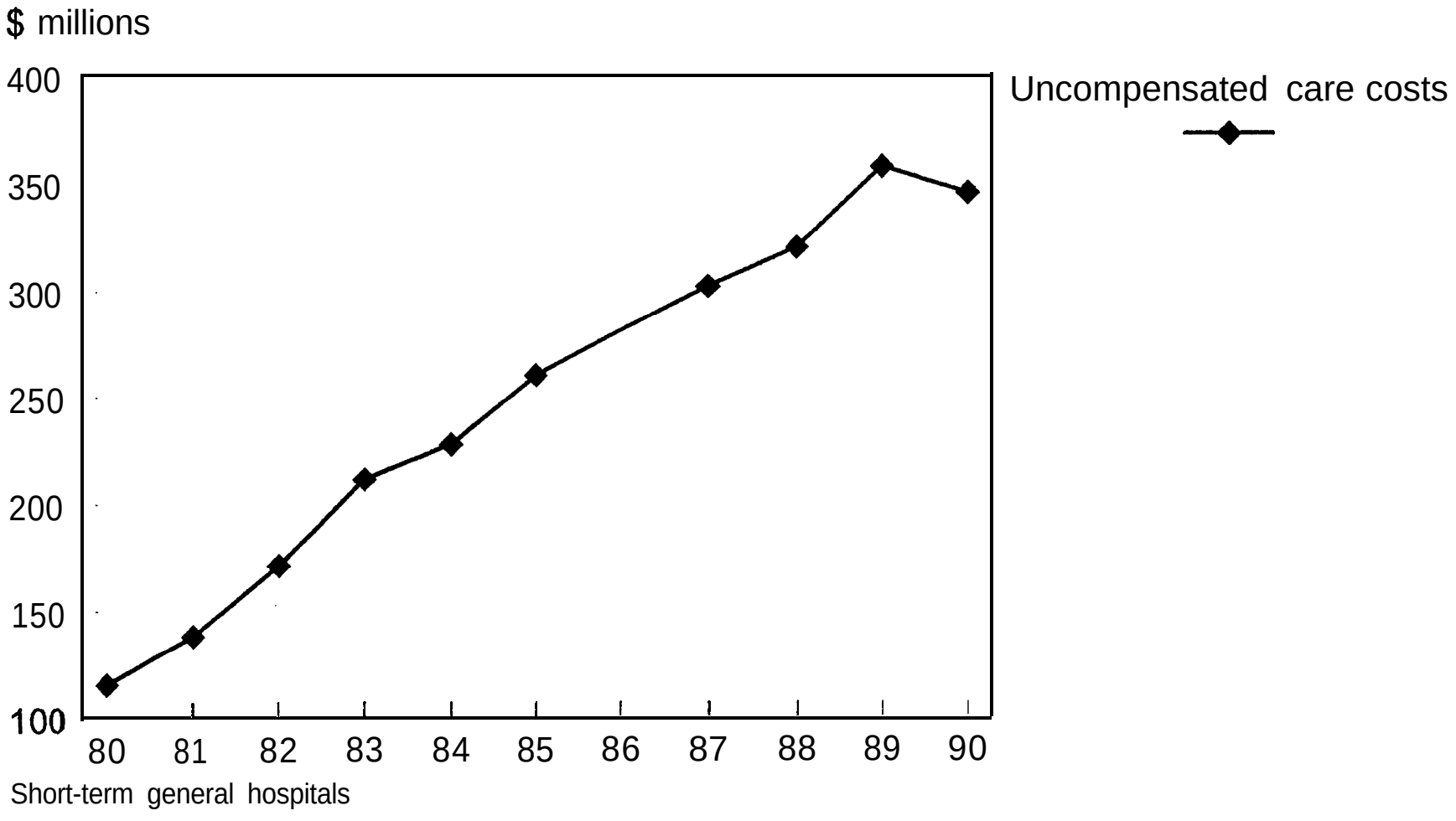


Fig. 4.4. Uncompensated Care as Share of Hospital Costs, Tennessee

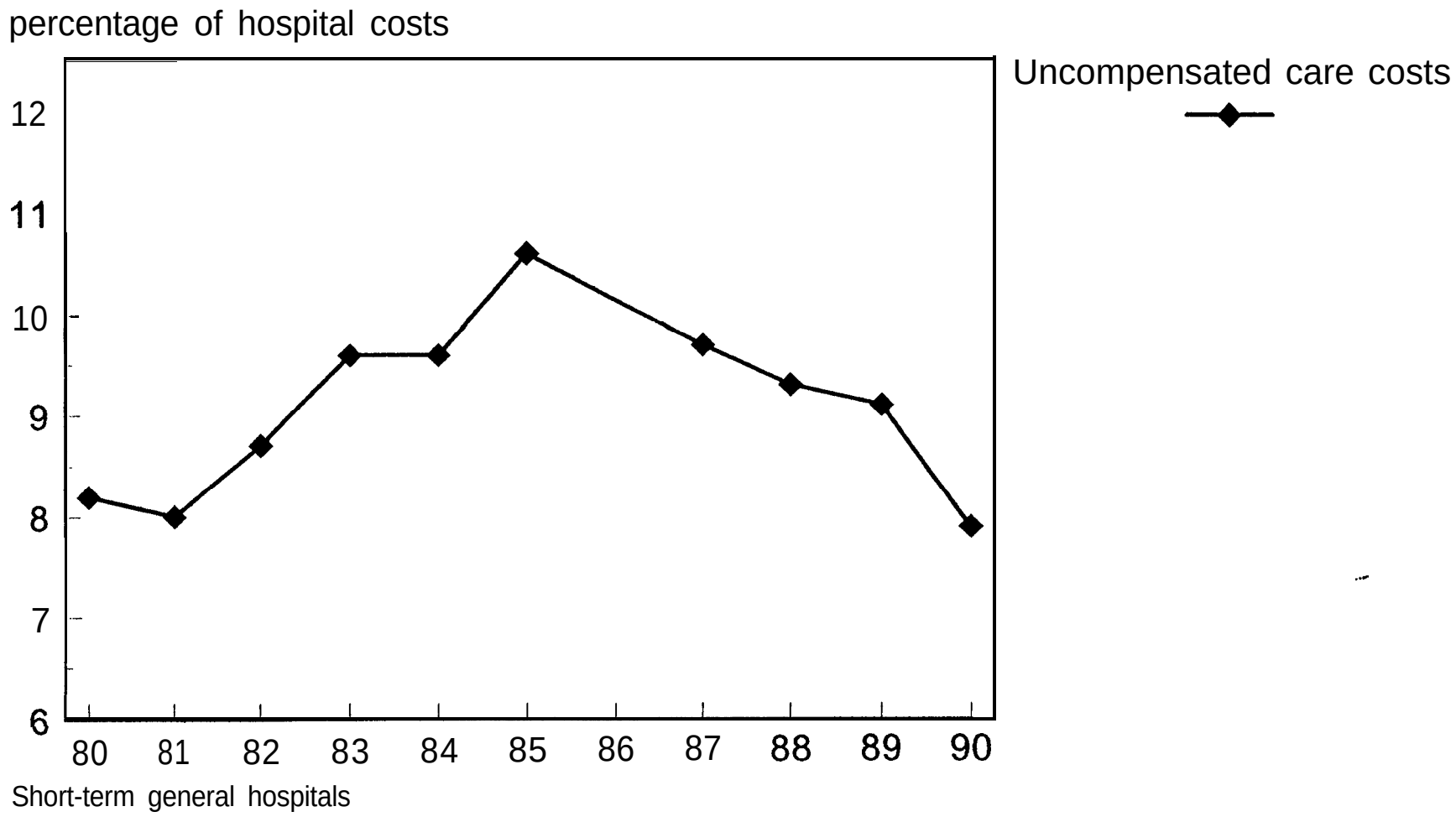
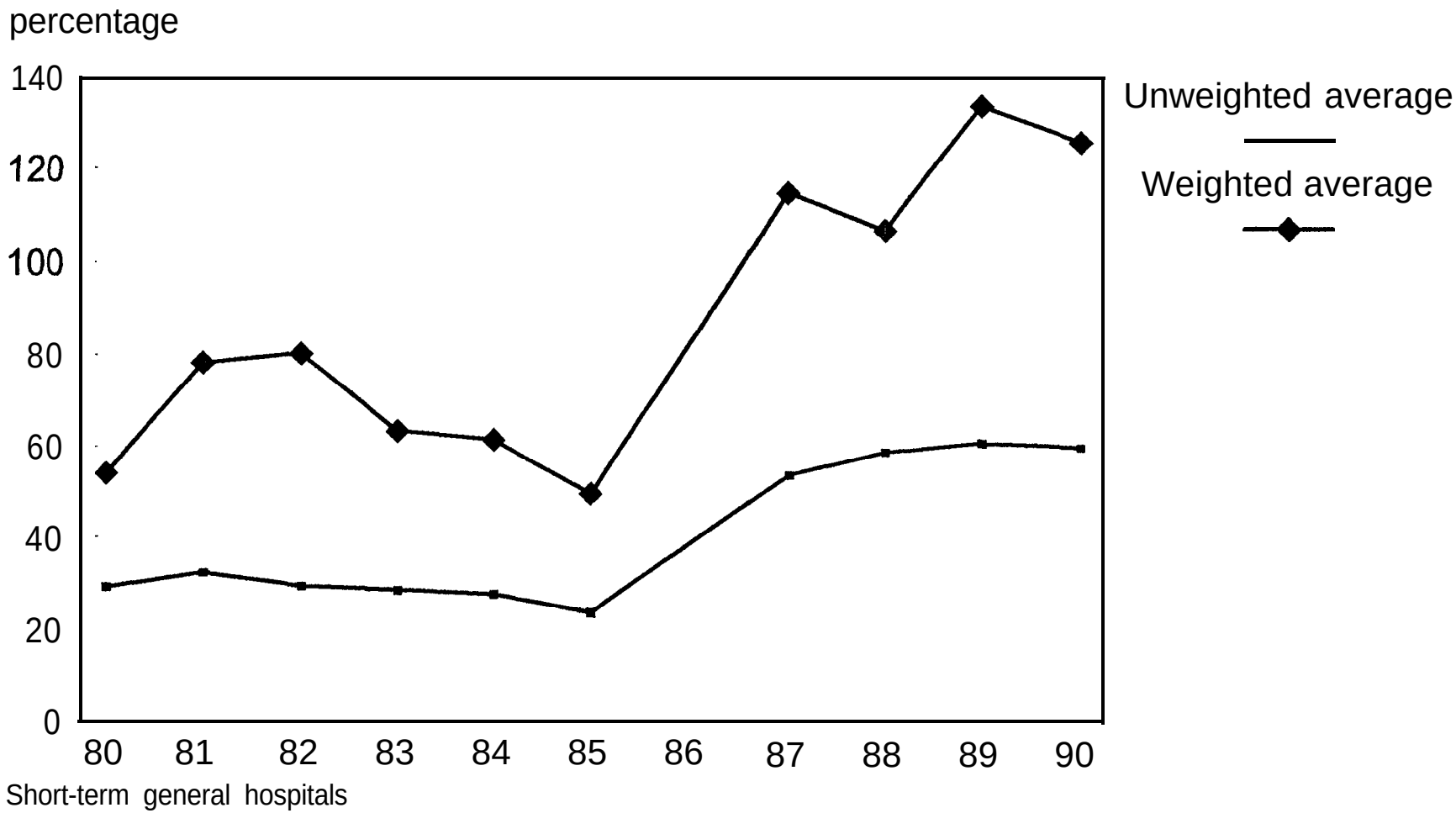


Fig. 4.5. Charity-tb-Bad Debt Ratio, Tennessee, 1980-90



care, many hospitals may be hard-pressed to meet the standard.[28] The weighted average indicates, however, that overall charity care in Tennessee exceeds bad debt. Previous studies which concluded that bad debt accounts for over two-thirds of uncompensated care were apparently based on the unweighted average.

Both measures of the ratio of charity care to bad debt rose during the decade. It is difficult to distinguish whether the rise occurred because hospitals actually provided more charity care or because hospitals made a greater effort to identify charity care. Significantly, both measures increased noticeably between 1985 and 1987, when the state included a formal definition of medical indigence on the instructions for the survey. This increase suggests that states can clarify the distinction between bad debt and charity care by giving hospitals a formal definition to work with.

As mentioned, a unique aspect of Tennessee's reporting system is that hospitals can report subtotals for total uncompensated care without separately reporting bad debt, charity care, or medically indigent charges. This option, which has been available since 1987, also introduces the possibility that reported subtotals for bad debt, charity care, and medically indigent will not add up to the total reported as overall uncompensated care. In each year between 1987 and 1990, between 15 and 37 (out of 140) hospitals either did not report separate figures for individual components of uncompensated or reported subtotals which did not add up to total reported uncompensated care. In three

[28]Recall that the GAO (1990) report found that while most hospitals did provide uncompensated care amounts similar to the value of their tax-exempt status, when the criteria was changed from uncompensated care to charity care, many hospitals failed. Given the figures from Figure 4.5, it would appear that a large number of Tennessee hospitals would also fail to meet the standard.

of the four years, the discrepancies were relatively minor. In 1988, however, one hospital reported $2 million of bad debt, no charity care or medically indigent charges, and $71 million of total uncompensated care.

The preceding aspect of Tennessee's system offers an interesting dilemma for policymakers designing systems for collecting data on uncompensated care. If hospitals. can report uncompensated care totals without reporting separate figures for charity care and bad debt, at least some useful information can be collected from hospitals which do not distinguish between the two types of uncompensated care. On the other hand, if hospitals can choose to only report total uncompensated care totals, they may not reveal all of the information they have readily available. Most of the Tennessee hospitals which only reported total uncompensated care had previously reported separate levels of bad debt and charity care.

About the same percentage of individual hospitals reported wide fluctuations in total uncompensated care in Tennessee as in Florida. Again, many of these fluctuations may represent real changes in uncompensated care. Some appear to follow changes in ownership, while others may reflect random shocks in the patient mix received by small, rural hospitals. Over 40 Tennessee hospitals changed ownership during the decade, and many of the hospitals in the state are quite small.

Like Florida, Tennessee hospitals experienced fairly wide variations in the mix between bad debt and charity care (here defined as the sum of official charity care and medically indigent). Flip-flops of bad debt and charity care were again common.

Missing variables appear to be a slightly more important problem in the Tennessee data than in the Florida data. Because Tennessee hospitals some-

times reported only total uncompensated care, missing values for bad debt were more common in Tennessee, although still relatively rare, and were usually accompanied by missing values for charity care. Missing values for charity care were much less common than in Florida (less than 5 percent of all responses), apparently because Tennessee hospitals providing zero charity care entered zeroes in their surveys, while Florida hospitals with zero charity care left blanks in their surveys. However, when missing values do occur in the Tennessee data, they have more noticeable effects on total uncompensated care. Some hospitals' uncompensated care "totals" fell 2 to 3 percentage points when charity care was missing.

Surprisingly, more than two-thirds of hospitals reported positive levels of bad debt or charity care in outpatient settings in 1990. Apparently, many accounting systems can make distinctions between such settings. As the hospital administrators we interviewed suggested, the ratio between outpatient and inpatient charity care was much lower than the corresponding ratio for bad debt.

It appears that not all hospitals in Tennessee make clearcut distinctions between medically indigent and other types of uncompensated care. Only about half of the hospitals report positive levels of deductions on charges to medically indigent patients. Even some hospitals reporting large overall uncompensated care burdens report zero deductions for medically indigent patients. Most of the deductions for medically indigent patient cover low income medically indigent; barely 10 percent of hospitals report deductions for other medically indigent patients.

Use of Data

Tennessee hospitals' primary direct incentive for providing accurate information on uncompensated care arises because disproportionate share payments under the state's Medicaid program are based, in part, on the amount of uncompensated care provided by the hospital. One of the three ways a hospital can qualify for disproportionate share status is by experiencing a low income utilization rate greater than 25 percent, where low income utilization is defined as the sum of uncompensated care charges divided by total hospital charges and Medicaid and local government charges divided by total hospital charges. For each percentage point increment above 25 percent, regular Medicaid payments are increased by 2 percent, up to a maximum of 10 percent. In addition, total disproportionate share payments cannot exceed 80 percent of inpatient uncompensated care.

The uncompensated care figures collected on the Joint Annual Report are also used by the state Health Facilities Commission when it considers Certificate of Need applications. Although it is difficult to say how much impact the figures have on CON decisions, one official suggested that the commission was more likely to approve applications by hospitals providing very large shares of uncompensated care.

Documentation

Unlike Florida, Tennessee does not place explicit guidelines on the documentation of charity care; instead, hospitals must make a "reasonable determination" of the patient's ability to pay. Hospitals must have a policy for making the "reasonable determination" of a patient's status and apply the policy consistently, but there are no requirements for documentation like those in Florida. Since policies within the state are based on total uncom-

pensated care costs instead of charity care alone, state regulators probably see little need for carefully documented distinctions between bad debt and charity care. The state's department of Health Statistics and Information, which collects the Joint Annual Reports, checks the reports to be sure that the numbers add up, but makes no additional audits.

E. Other States

Many other states collect financial data similar to that collected by Florida and Tennessee. In 1989, the National Association of Health Data Organizations compiled a survey of 19 state hospital reporting systems. Table 4.1 shows whether the state collects data relevant to the uncompensated care issue. The list of states is by no means exhaustive; Tennessee was not surveyed, nor were Iowa and Michigan, states providing uncompensated care information for the GAO's study of uncompensated care (GAO, 1990). States with reporting systems that significantly differed from Florida's (which commissioned the study) were excluded from the survey. Most state Medicaid agencies also require hospitals to file cost reports which are similar to the Medicare Cost Report.

The table strongly indicates that many hospitals are already required to report uncompensated care information. Almost all of the states that collect any financial information also collect information on uncompensated care. All of the states require enough information on revenues and costs to calculate cost-to-charge ratios. Most of the states also collect data on contractual allowances, although it is not clear whether they divide revenue and allowances by payer sufficiently enough to calculate Medicare and Medicaid shortfalls.

Table 4.1 .States Which Collect Hospital Financial Data

	Expenses	Gross and net revenue	Deductions	Contractual allowances	Bad debt	Charity/uncompensated care	First year available
Arizona	X	X	X	X	X	X	81
California	X	X	X	X	X	X	75
Connecticut	X	X	X	X	X	X	73
Florida	X	X	X	X	X	X	80
Illinois	X	X	X	X	X	X	N/A
Indiana	X	X	May differ	according to	hospital fin.	statement	a3
Maine	X	X	X	X	X	X	83
Maryland	X	X	X	X	X	X	early 70s
Massachusetts	X	X	X	X	X	X	68
Nevada	X	X	X	X	X	X	a6
New Jersey	X	X	X	X	X	X	02
New York	X	X	X	X	X	X	70
Oregon	X	X	provided in	aggregate	not broken	out by category	78
Pennsylvania	X	X	provided in	aggregate	not broken	out by category	88
Rhode Island	X	X	X	X	X	X	N/A
Vermont	X	X	X	X	X	X	84
Virginia	X	X	X	X	X	X	79
Washington	X	X	X	X	X	X	75
West Virginia	X	X	X	X	X	X	84
Wisconsin	X	X	X	X	X	X	87

Source: National Association of Health Data Organizations, "A Comparison of State Hospital Financial Reporting Systems," 1989.

We talked to officials in a number of the state data collection agencies which routinely collect or use information on uncompensated care levels in individual hospitals. For several states, we also obtained copies of the survey which the state uses to collect information on hospital uncompensated care. We asked the officials to describe 1) what types of data are collected, 2) how the state defines different components of uncompensated care, 3) whether the state audits reported values, and 4) how the data is used by the state. The last issue is important because hospitals will have greater incentives to keep detailed records on uncompensated care if the information is used to determine hospital reimbursement or tax exemption. Reported levels of charity care and bad debt may also be affected if state policies distinguish between the two. Results of the interviews appear below.

Arizona

Arizona's Office of Health Economics and Facilities Review collects hospital financial data on its Uniform Reporting System. Among the financial variables collected are bad debt and charity care, as well as other deductions from charges for Medicare, Arizona Health Care Cost Containment System (AHCCCS, the state's alternative to Medicaid), and privately-insured patients. The office uses the financial data to make non-binding recommendations on hospital rate changes. AHCCCS also uses the information to determine whether a hospital qualifies for disproportionate share status.

Other than a manual test for consistency with the previous year's level of uncompensated care, the office performs no general validity tests or auditing of reported figures.

California

California, which operates one of the most comprehensive data collection agencies, faces some unique issues related to uncompensated care. First, the state's Medicaid program, Medical, negotiates directly with hospitals to se: Medical rates. Second, MediCal patients must pay small copayments. Finally, the state has a widespread network of county medical programs for the indigent.

Uncompensated care data is collected by the Health Facility Data Division of the Office of Statewide Health Planning and Development. In the opinion of one division official, the overall uncompensated care data are pretty good. She notes two potential problems, however. First, some Medical patients do not pay their copayments. In principle, these deductions from revenue should be classified as either bad debt or charity care, depending on the patient's ability to pay. In practice, however, some hospitals classify the deductions as Medical contractual allowances. Although the overall effect of such misclassification is likely to be small, since the copayments are small relative to the total hospital bill, the effects could be important for a few hospitals with high Medical volume. The second problem arises from a recent change in the way patients who are eligible for county medical indigence programs are classified. Prior to 1992, all charges for eligible patients were classified as charity care; payments for these patients were included as a separate entry under other revenue. Beginning in 1992, charges to the medically indigent are classified separately from bad debt and charity care. This reclassification will complicate comparisons of uncompensated care over time. In addition, because hospitals receive limited reimbursement for

indigent care from the counties, shortfalls can legitimately be counted as charity care. Not all hospitals make this classification, however.

Medical randomly audits hospitals to check the accuracy of reported financial data. Specific audits of charity care were performed prior to passage of a tobacco tax which is used to fund county indigent plans. Medical currently uses uncompensated care data to determine disproportionate share payments. The data are probably also considered when Medical negotiates with individual hospitals on reimbursement rates.

Illinois

The Illinois Health Care Cost Containment Council collects information on bad debt and charity care in state hospitals. However, the Council's director of research and development considers these figures among the least accurate that the Council collects. Because the figures are neither edited nor audited, he does not use the split between the two types of uncompensated care for research or planning purposes, nor does he recommend that others use the information. The director is somewhat less critical of the aggregate uncompensated care figure, but still skeptical that overall uncompensated care is reported consistently across hospitals. The state's Medicaid program apparently collects independent information on uncompensated care which it uses to determine disproportionate share hospitals.

Maryland

Maryland is one of the few states with an all-payer hospital rate-setting system. Uncompensated care costs are built directly into each hospital's rates on a historical basis. As part of the annual rate review

process, the state's Health Services Review Commission collects information on bad debt and charity care in both inpatient and outpatient settings. Hospitals are given fairly standard instructions for distinguishing between bad debt and charity care, with the additional instruction that uncompensated care is not to include contractual allowances. Although hospital rates depend on overall levels of uncompensated care, the state plans to introduce a form of auditing to determine how the breakdown between charity care and bad debt conforms to a hospital's accounting figures and charity care mission statement.

Once the state collects uncompensated care data from all hospitals, the data are regressed on a set of hospital characteristics. The results of this regression are used to estimate a predicted uncompensated care level for the hospital. The predicted value, rather than the hospital's actual level of uncompensated care, is used to adjust the hospital's rates, unless the actual value is less than the predicted value, In the latter case, the hospital's rates are adjusted downwards.

The official in charge of collecting the data believes that hospitals accurately report overall uncompensated care levels. In addition, she believes that hospitals have the ability to distinguish between bad debt and charity care, but is not sure how well they do so in practice. She has very little confidence in the breakdown between inpatient and outpatient uncompensated care, even though all but a couple of small hospitals attempt to distinguish between the two setting. Implausibly, some hospitals report greater uncompensated care in outpatient settings than in inpatient settings.

Massachusetts

Massachusetts operates an uncompensated care pool which directly reimburses hospitals for uncompensated care costs. With a current annual budget of $335 million, the uncompensated care pool is a significant source of funding for hospitals. Because of the size of the pool's payments, Massachusetts has the clearest definition of charity care, which the state calls "free" care, and the strongest documentation requirements of the states we surveyed. Like Florida and Tennessee, charity care is defined on the basis of a patient's income. All care received by uninsured patients with income less than 200 percent of the federal poverty line is considered as free care, while care received by higher income uninsured patients is classified as free care according to a sliding scale. There is no upper income limit on free care patients' incomes.

To document provision of uncompensated care, hospitals submit monthly summaries to the state's Department of Medical Services. The summaries include 8 to 10 line items such as aggregate free care, bad debt, recoveries of bad debt, etc. Department auditors then visit a random sample of hospitals to audit the accuracy of the monthly reports. Hospitals are required to provide auditors with 1) a list of names of patients receiving uncompensated care, 2) medical records documenting that services were actually provided for the charges listed as uncompensated care, 3) signed applications for free care which include evidence of the patient's income, and 4) documentation of minimum collection efforts (number of telephone conversations, letters, and formal classification of bad debt status by a hospital official). Although

the audits have raised some minor definitional issues,[29] they have not found widespread problems with the information reported by individual hospitals, according to the assistant commissioner of the uncompensated care pool.

In response to a legislative mandate, the uncompensated care pool began in April 1992 to reimburse hospitals only for free care and a portion of bad debt. "Good" bad debt--bad debt on emergency care received by the uninsured--is now distinguished from "bad" bad debt--bad debt for nonemergency services, and coinsurance and deductibles for insured patients, Only "good" bad debt is eligible for reimbursement. Immediately prior to April, reimbursement from the pool was based on a hospital's total uncompensated care. An earlier departmental attempt to reduce pool payments to hospitals reporting excessive amounts of bad debt was overturned by a state court.

Because bad debts are no longer completely covered by the pool, hospitals will now have increased incentives to document free care levels. Indeed, the assistant commissioner has noticed an increase in the ratio of free care to bad debt reported by hospitals.

Vermont

Although Vermont has fewer than 20 hospitals, the state is especially relevant for uncompensated care policy because it was the site of one of the most celebrated recent challenges to a not-for-profit hospital's tax-exempt status. In 1989, the city of Burlington presented the Medical Center Hospital of Vermont with a property tax bill. The city claimed that the hospital should lose its tax exemption because it provided insufficient amounts of

[29]The definitional issues involved how to classify Medicaid denials and Medicare bad debt.

uncompensated care. The case ultimately reached the Vermont Supreme Court, which rejected the city's argument (Henry, 1991; Lumsdon, 1991).

Both sides in'the dispute used data on uncompensated care routinely collected by the Vermont Hospital Data Council. The Council collects separate information on free care (equivalent to charity care in other states) and bad debt. Instructions to the annual survey recommend that care received by uninsured patients with income less than 100 percent of the poverty line be classified as free care. The Council does not require documentation of free care, however. Reported figures are checked for consistency with previous years before the Council makes nonbinding recommendations on a hospital's proposed budget.

Apparently, the Medical Center Hospital of Vermont made little attempt to distinguish its bad debt from free care and reported its total level of uncompensated care as bad debt. Given the publicity generated by the trial, one might now expect Vermont hospitals to spend greater effort to identify free care. Free care has risen during the last two to three years, even though total uncompensated care has remained the same, according to the executive director of the Hospital Data Council. He is still not certain that the reported mix between free care and bad debt accurately reflects the actual mix, although he believes that the overall uncompensated care data are pretty good.

Wisconsin

Wisconsin's Office of Health Information uses two instruments to monitor hospital uncompensated care. The Hospital Fiscal Survey collects typical hospital financial data, including bad debt and charity care. It is similar

to the American Hospital Annual Survey; financial questions on both surveys are based on the principles in Audits of Providers of Health Care Services (American Institute of Certified Public Accountants, 1990). Thus bad debt is classified as an expense, while charity care is defined as payments "for health services that were never expected to result in cash inflows. Charity care results from a provider's policy to provide health care services free of charge to individuals who meet certain financial criteria." The Fiscal Survey provides no further instructions for distinguishing between bad debt and charity care.

The Hospital Uncompensated Care Plan requires hospitals to explain their policy regarding charity care, as well as report current and projected uncompensated care data. Hospitals must summarize the procedures used to 1) determine a patient's ability to pay, 2) verify financial information provided by a patient, and 3) inform patients about the availability of charity care. For data collection purposes, a potentially useful part of the survey's definition of uncompensated care is a statement about what charity care does not include. Specifically excluded from charity care are contractual allowances to public and private payers, employee discounts, courtesy discounts, and bad debts. Contractual allowances to any public payer, not just Medicaid or Medicare, are excluded. The charity care figures reported in the Uncompensated Care Plan must match those reported in the Hospital Fiscal Survey, however, and the definition of charity care in the latter survey does not state the exclusions.

Based on the surveys, the Office of Health Care Information publishes an annual booklet entitled Uncompensated Health Care, Wisconsin Hospitals. Significantly, total uncompensated care figures, but not separate classifica-

tions for bad debt and charity care, are reported. According to one Wisconsin official, the reported distinctions between bad debt and charity care are still somewhat fuzzy, although the overall uncompensated care numbers are good.

Apparently, Wisconsin's Medicaid program does not use the data collected by the Office of Health Care Information to set disproportionate share payments. In this regard, it is worth noting that Wisconsin has an extremely low uninsured rate and relatively low levels of uncompensated care. Uncompensated care charges in Wisconsin general hospitals totaled $103 million, barely a fifth of uncompensated care charges in Tennessee, even though the states have nearly the same population.

Discussion

Hospital data on uncompensated care are used for a variety of purposes in the states we survey. The data are barely used in internal research in Illinois. In other states, the data are publicly disseminated (Wisconsin) or used as part of state rate review proceedings (Arizona and Vermont). In some states, hospital reimbursement rates are tied directly to uncompensated care levels, either through Medicaid disproportionate share payments (Arizona, Florida, and Tennessee) or as part of a broader mechanism based primarily on uncompensated care (Maryland and Massachusetts). The uncompensated care data may also be used in Certificate of Need proceedings or disputes over hospital tax exemption.

The definition of charity care varies somewhat between states. Some states provide a general definition for charity care, while other states instruct hospitals to base the definition on a patient's income. States using

the latter instructions vary in the choice of threshold, with different states setting the threshold at 100, 150, or 200 percent of the poverty level; some states allow families with income above the threshold to qualify for partial charity care according to a sliding scale. These differences may complicate interstate comparisons which focus solely upon charity care.

States which distinguish between charity care and bad debt for reimbursement purposes, such as Florida and Massachusetts, define charity care more precisely and require more documentation than other states. Maryland, where reimbursement depends almost as much on uncompensated care as it does in Massachusetts, does not distinguish between the different types of uncompensated care, however.

Except in Illinois, officials in state agencies express confidence in the aggregate uncompensated care data they collect. They generally express less confidence in the distinction between bad debt and charity care. Charity care appears to be increasing as a percentage of uncompensated care, particularly in states where reimbursement policies distinguish between charity care and bad debt or hospitals have faced challenges to tax-exempt status. This suggests that hospitals respond naturally when they face greater incentives to distinguish between types of uncompensated care.

F. Conclusion

Our analysis of existing data sources on uncompensated care suggests that the data collected by state agencies offer the best guide should HCFA decide to require hospitals to report information on uncompensated care. While AHA annual surveys provide valuable information for monitoring national and statewide trends in uncompensated care, their usefulness for analyzing

individual hospital behavior or setting standards for tax-exempt and disproportionate share status is limited because hospital responses are voluntary and confidential.

In contrast, state experience suggests that nearly complete data on uncompensated care at individual hospitals can be and is being collected. Hospitals appear to report total uncompensated care (bad debt plus charity care) fairly consistently over time. Distinguishing between bad debt and charity care appears more problematic. However, states such as Florida and Massachusetts, which base components of reimbursement on charity care alone, have explicitly based the distinction on patient income and issued regulations requiring hospitals to document cases where the patient qualifies for charity care. Such regulations will make the distinction between bad debt and charity care more consistent across hospitals, but will increase hospitals' administrative costs of compliance.

Results from Tennessee suggest that many hospitals can make distinctions between uncompensated care in inpatient and outpatient settings, but other hospitals do not. Bad debt accounted for a larger share of uncompensated care in outpatient settings than it did in inpatient settings. However, most states do not distinguish between inpatient and outpatient uncompensated care. Instead, both types are lumped together.

CHAPTER 5. RECOMMENDATIONS

In this chapter, we return to the conceptual issues introduced in Chapter 2 and recommend how to resolve the issues. Preliminary recommendations regarding many of the issues were presented in Chapter 2; for these issues, we only provide a brief summary of the reasons for our recommendations. We provide more complete reasoning for issues left unresolved in Chapter 2. Recommendations on these issues are based on our interviews with hospital administrators and officials in state data collection agencies, as well as our analysis of Florida and Tennessee data on uncompensated care. For convenience, for each issue we list the page numbers for the corresponding discussion in Chapter 2.

1. What do we want to measure? (pp. 33-34)

Recommendation 1: We recommend that measures of uncompensated care should attempt to embody two basic principles:

1) Uncompensated care should represent care provided to people who cannot afford to pay for that care.
2) The hospital's actual contribution to uncompensated care should be measured.

As explained in Chapter 2, the three proposed uses for uncompensated care data focus primarily on providing care for people who cannot afford to pay for that care. Policymakers are presumably much less interested in free care received by people who can afford to pay for their care. The second

principle implies that the measurement of uncompensated care should be based on the opportunity costs of uncompensated care; that is, how much the hospital actually forgoes when it provides the care.

2. Bad debt vs. charity care: Should bad debt be included as uncompensated care? (pp. 34-39)

Recommendation 2.a. If HCFA begins to collect data on uncompensated care, we recommend that hospitals should report separate figures for bad debt and charity care. For the moment, however, we recommend that HCFA and other policymakers use the broader definition of uncompensated care (bad debt plus charity care) when monitoring trends in uncompensated care or as the basis for tax exemption or disproportionate share status.

We believe that the conceptual distinction between bad debt--the charges owed by patients who can afford to pay but don't--and charity care--charges owed by patients who cannot afford to pay, is important. As we suggest in our first principle for uncompensated care measurement, policymakers are primarily interested in patients who cannot afford to pay for their care. Requiring hospitals to report both bad debt and charity care will encourage hospitals to develop accounting systems which distinguish between bad debt and charity care.

At the same time, we recognize that making the distinction between bad debt and charity care is still difficult in practice. The definition of charity care currently varies between states, complicating interstate comparisons. Even within states where hospitals have been required to report

separate figures for bad debt and charity care for years, hospital administrators and many state officials believe that the distinction between bad debt and charity care is fuzzy at best. Making the distinction is likely to be more difficult for hospitals in states which are not currently required to report uncompensated care information. The difficulty in distinguishing between the two components of uncompensated care is clearly evident in information reported by individual hospitals in Florida and Tennessee, where reported mixes of charity care and bad debt fluctuated much more than overall uncompensated care levels. Some hospitals in Tennessee only reported overall uncompensated care levels, without distinguishing between components.

At this time, therefore, we believe that public policies such as tas exemption and disproportionate share status should be based on the sum of a hospital's bad debt and charity care. If accounting systems become better able to distinguish between bad debt and charity care at a later date, policies could then be based solely on charity care.

Recommendation 2.b. If the broader definition of uncompensated care is used in standards for tax exemption or disproportionate share payments, the standards should recognize that some portion of uncompensated care does go to patients who can afford to pay, but don't (the traditional definition of bad debt). Hospitals should have to go beyond this level in order to qualify for tax exempt or disproportionate share status.

Most businesses incur bad debts when they provide goods or services to customers who subsequently fail to pay their bills. In this respect, it may be inequitable to allow hospitals to receive benefits such as tax esemption

simply because they incur normal costs of doing business. While Recommendation 2.a. recognizes that some portion of reported bad debt cannot be distinguished from charity care, we also believe that some portion does go to patients who can afford to pay. And according to our first principle of uncompensated care measurement, this portion of bad debt should not be included in a conceptually-correct measure of uncompensated care.

Therefore, we recommend that policy decisions be based on the hospital's level of uncompensated care minus a threshold value which is designed to represent bad debt at an average hospital for care received by patients who can afford to pay. For example, if the threshold equals 3 percent of a hospital's costs, and the hospital reports total uncompensated care equal to 7 percent of costs, the hospital would be considered to have "true" uncompensated care costs of 4 percent. As mentioned in Chapter 2, possible thresholds include the average bad debt level for for-profit hospitals which provide no charity care in a state, average bad debt levels for Medicare patients, or levels of bad debt in comparable non-hospital businesses. The precise level would have to be' determined empirically. While we have not studied this issue in depth, we note that in 1990 bad debt averaged about 4 percent of hospital costs in Florida for-profit hospitals and 3.6 percent in Tennessee for-profit hospitals.[30] In Florida, about half of the for-profit, 6 percent of government, and 12 percent of the not-for-profit hospitals had total uncompensated care percentages less than 4 percent. Among non-hospital industries, only

[30]The for-profits' average total uncompensated care levels were 4.6 percent in both states. However, for-profit hospitals may have incentives to overstate bad debt and understate charity care for accounting and tax purposes.

bank holding companies, savings and loans, and personal credit institutions experience bad debt levels above 4 percent (Troy, 1992).[31]

Recommendation 2.c. We recommend that clear instructions be given to hospitals for distinguishing between bad debt and charity care. Precise instructions are especially important if tax exemption or disproportionate share payments are based only on charity care.

The instructions to any survey of uncompensated care should clearly distinguish between bad debt and charity care. At a minimum, the instructions for filling out the survey of uncompensated care should include:

1. A definition of bad debt which states that this category includes unpaid charges to persons who can afford to pay for their care and for which usual collection efforts have been made. Instructions for Tennessee's Joint Annual Report provide a good esample:

> "Bad debts represent uncompensated care for which the hospital directly billed the patient and for which the patient should reasonably be expected to pay. (A vigorous in-house collection effort until such time as the account can clearly be determined to be bad debt (such as the patient cannot be located) or for a period of at least 180 days is assumed.) The hospital would declare the account as a bad debt after determining that the patient or the guarantor has income and/or assets which would enable him/her to pay, but

[31] Potentially, reported hospital bad debt could include bad debt incurred by nonpatient purchasers of hospital services which, according to our conceptual definition, should not be included as uncompensated care. In practice, any bias resulting from including nonpatient bad debt in uncompensated care is likely to be slight since patient revenue provides the overwhelming majority of total hospital revenue and nonpatient bad debt rates are probably similar to the low bad debt levels enjoyed by nonhospital industries (Troy, 1992). In addition, the structure of state cost reports, which typically subtract bad debt and charity care from gross patient revenue to derive net patient revenue, encourages hospitals to report only patient bad debt.

> the patient or guarantor ignores all collection efforts. Bankrupt accounts would be considered bad debts unless there is documented evidence that the medical bill caused the bankruptcy and then this would be counted as medically indigent (charity care)."

2. A definition of charity care which states that the services are provided to needy persons who have insufficient ability to pay, as determined by an investigation of the patient's income, assets, and liabilities. Again, Tennessee provides a sample definition:

> "Services provided to medically needy persons for which the hospital usually does not expect payment. These persons have insufficient income and/or assets with which to pay for their care. They are not eligible for Medicaid or other state or federal programs or benefits of the these programs have been exhausted. The patient has no income or has a very limited insurance policy. A patient is considered to be a charity patient if, after meeting with the patient or guarantor and performing a thorough investigation of his/her past payment history, income, assets and liabilities, it is felt that the patient or guarantor is unable to satisfy part or all of the obligation due to socioeconomic conditions which are not expected to improve in the foreseeable future."

3. A statement of deductions from charges which should <u>not</u> be included as charity care. This list should include: contractual allowances to Medicare, Medicaid, and private insurers, courtesy and employee discounts, and bad debts.

If charity care is to be the only criteria for tax exemption or disproportionate share standards, hospitals should be given additional guidance about how to determine if a patient has insufficient ability to pay for medical care. Imprecise instructions will lead to inconsistent classification of charity care across hospitals, as well as a sort of charity care "creep" as

care formerly treated as bad debt is reclassified as charity care.[32] Guidelines could be based on the federal poverty line. For example, Florida, which focuses on charity care instead of total uncompensated care, states that no patient will be considered a charity/uncompensated care patient whose family income for the preceding year exceeds 150 percent of the current Federal Poverty Guidelines unless the amount of hospital charges due from the patient exceeds 25 percent of the family's annual income; in addition, care received by patients whose family income is four times greater than the Federal poverty level cannot be recorded as charity care. Guidelines based on the federal poverty level will necessarily be arbitrary, since catastrophic illnesses could easily outpace the incomes of middle-class families; however, the guidelines would provide a more consistent definition of charity care across hospitals.

Recommendation 2.d. Given our recommendation that overall uncompensated care levels be used if standards for tax exempt status or disproportionate share payments are adopted, we do not recommend that hospitals be required to submit documentation for their distinctions between bad debt and charity care. Instead, hospitals should maintain written copies of a formal uncompensated care policy and be prepared to show that uncompensated care is actually provided to patients. Greater documentation is probably required if policies are based on charity care alone. Even so, requirements for documenting charity care should be carefully weighed against the costs of documentation.

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[32]Some creep will occur naturally if the distinction between charity care and bad debt becomes more important. Currently, hospitals have relatively little incentive to make the distinction. As the returns increase, hospitals can be expected to spend more effort to distinguish between the two components of uncompensated care.

The cost of reporting uncompensated care figures will rise substantially if hospitals are required to submit careful documentation of total uncompensated or charity care charges. Currently, most states that collect uncompensated care information perform only minimal checks on the data (i.e., do the numbers add up?), even though some of the states use the information to determine Medicaid disproportionate share payments. Most officials believe that hospitals' total uncompensated care levels are reported reasonably accurately. To minimize outright fraud, hospitals should probably be required to maintain written uncompensated care policies and be prepared to show that uncompensated care actually is delivered to patients. Hospital industry officials already recommend that hospitals establish formal uncompensated care policies and maintain internal records of the uncompensated care they provide.

The need for documentation will probably rise if policies are based solely on the amount of charity care provided. Significantly, two states which base reimbursement directly on charity care, Florida and Massachusetts, require extensive documentation of charity care. In the case of Massachusetts, random audits of charity care levels are conducted monthly. Hospitals in both states reported that several employees worked primarily on documenting uncompensated care. Policymakers should consider these costs before adopting policies based solely on charity care.

Further documentation may also be necessary if the gains from reporting uncompensated care, either in the form of foregone taxes or greater disproportionate share payments, rise. Regulators could either require all hospitals to submit documentation of uncompensated care each period or only require hospitals to make documentation available in borderline cases. The latter option is likely to be less expensive for both hospitals and regulators.

Recommendation 2.e. If policies are based solely on charity care, we recommend that hospitals **not** be required to classify patients as "charity care" patients according to a strict time schedule. Thus, hospitals would not be required to classify a patient as charity care upon admission or before beginning collection efforts, as long as the hospital has an established policy for classifying patients.

Under the Hill-Burton Act, which requires hospitals receiving program funding to provide indigent care, hospitals must classify patients as charity care before collection efforts begin and within two days of receiving a patient's application for charity care (Blumstein, 1986). However, none of the hospital administrators we talked to applies strict timeliness criteria to classify charity care patients. Timeliness criteria are also not applied by any of the states whose officials we talked to. The administrators believe that important information about a patient's ability to pay may be revealed during collection efforts. Determination of charity care status upon admission is inappropriate because some patients incur unexpected catastrophic expenses during their stay. In addition, hospitals have little opportunity to determine ability to pay for many patients admitted through the emergency room, a major source of uncompensated care.

3. Costs vs. charges: How should uncompensated care be measured?

(pp. 39-41)

We recommend that hospitals should report uncompensated care on the basis of charges. For policy and research purposes, however, the charges should be converted to uncompensated care costs.

As previously described in Chapter 2, there are three major reasons why policy and research should be based on uncompensated care costs instead of charges. First, our conceptual definition of uncompensated care suggests that cost is a much better measure of a hospital's contribution to uncompensated care, since hospitals do not expect to receive anything when they provide uncompensated care. Second, almost no one pays listed hospital charges anymore; thus, studies comparing current uncompensated care to past levels will overstate increases in uncompensated care. Finally, different hospitals charge different mark-ups over costs, biasing inter-hospital comparisons of uncompensated care.

Nonetheless, hospital accounting systems record uncompensated care on the basis of the established charges for that care. Because such data are relatively easy for a hospital to produce, we recommend that uncompensated care be reported on the basis of charges. We assume that uncompensated care will be reported as part of a larger survey of hospital finances which includes information on hospital revenues and expenses. Such information can then be used by researchers and policymakers to convert uncompensated care charges to costs. Current Medicare Cost Reports include sufficient informa-

tion to make this conversion, as do all state hospital surveys which collect information on uncompensated care.

4. What type of cost should be used? (pp. 41-44)

We recommend that uncompensated care costs be evaluated on the basis of the hospital's average costs. This implies that uncompensated care charges should be converted to costs by multiplying by the hospital's overall cost-to-charge ratio.

As described in Chapter 2, the incremental cost of uncompensated care is the best conceptual measure of a hospital's contribution to patients who cannot pay for their care. Unfortunately, computing incremental costs in hospitals is a notoriously difficult, data intensive task. Therefore, for practical reasons, we recommend using a simple cost-to-charge ratio to convert uncompensated care charges to costs. As long as uncompensated care patients are not more severely ill than other patients (i.e., uncompensated and compensated care patients are equally costly to treat, holding the number of procedures and charges constant), the conversion factor will probably overstate the incremental costs of treating uncompensated care patients. We believe that the overstatement will be greatest for hospitals treating relatively few uncompensated care patients, since such patients are most likely to be treated on the margin. Therefore, if standards for tas esemption and disproportionate share payments are based on uncompensated care costs, our conversion will give the benefit of the doubt to hospitals with low levels of uncompensated care.

5. What cost-to-charge ratios should be used to deflate charges to costs?

(pp. 44-47)

We recommend that a relatively simple cost-to-charge ratio, such as the hospital's total expenses divided by its gross patient revenues, be used to convert charges to uncompensated care costs.

Our primary reason for making this recommendation is practical: to limit the computational burden on hospitals and policymakers, we wish to use the simplest possible method to convert charges to costs. The information needed for our conversion factor is already routinely collected by Medicare and state hospital agencies.

As described in Chapter 2, a conceptual disadvantage of our conversion method is its implicit assumption that the ratio between charges and costs for the procedures received by uncompensated care patients is the same as the average ratio for all patients in the hospital. This assumption could be tested using financial and discharge data collected by the state of California. Financial data on costs and charges by revenue center could be combined to calculate revenue center-specific cost-to-charge ratios. The discharge data could then be used to identify procedures used by uncompensated care patients, and a weighted cost-to-charge ratio for uncompensated care patients estimated. Similar cost-to-charge ratios for other payers could also be estimated. Barring such an analysis, which is beyond the scope of our study, we believe that it is appropriate to use a hospital-wide cost-to-charge ratio to calculate uncompensated care costs.

6. Should uncompensated care be measured net of state and local government subsidies? (p.48)

We recommend that uncompensated care data should be reported without subtracting state (excluding Medicaid) and local subsidies. Such subsidies should also be clearly reported, so that researchers and policymakers wishing to calculate uncompensated care net of subsidies can easily do so.

Our definition of uncompensated care suggests that uncompensated care costs net of government subsidies provides the best measure of a hospital's contribution to the poor. However, we believe that hospital uncompensated care provides an important measure of the access to medical care received by the uninsured. Collecting separate data on gross uncompensated care and state and local government subsidies would allow better monitoring of care received by the uninsured and the ability of state and local governments to finance such care. State or federal officials could then decide whether to base policies such as disproportionate share payments on the gross or the net level of uncompensated care.

7. Should uncompensated care be measured net of donations? (pp. 48-49)

We recommend that uncompensated care should not be measured net of donations.

Currently, charitable donations are relatively small compared to total hospital expenses, and there is no guarantee that they are explicitly tied to

indigent care. Consequently, we recommend that uncompensated care be reported gross of charitable subsidies;

8. Should Medicaid shortfalls be included in a measure of uncompensated care? (pp. 49-51)

We recommend that Medicaid shortfalls should **not** be reported by hospitals as uncompensated care. Medicaid shortfalls raise two issues closely related to uncompensated care. First, is there any difference between uncompensated care (payments less than costs by private patients) and Medicaid shortfalls (payments less than costs by Medicaid patients)? Second, if Medicaid shortfalls are similar to uncompensated care, how are the shortfalls to be measured? The first issue is conceptual, while the second issue involves the empirical task of determining whether Medicaid payments are adequate to cover the costs of treating Medicaid patients. Conceptually, we believe that Medicaid shortfalls are relevant for standards for tax exemptions and disproportionate share payments which attempt to measure a hospital's contribution towards patients who cannot afford to pay for that care. However, we believe that further research on how cost-to-charge ratios vary by procedure and by payer is necessary before Medicaid payment adequacy and, therefore, Medicaid shortfalls can confidently be computed. We recommend that such research should be performed. In the meantime, hospitals should report Medicaid gross revenue and Medicaid deductions from revenue.

As described in Chapter 2, Lewin, Eckels, and Roenigk's (1988) argument that Medicaid shortfalls should be considered alongside uncompensated care is consistent with our conceptual definition that uncompensated care represents

the hospital's contribution towards care that patients cannot afford to pay for. In practice, however, determining whether a Medicaid shortfall esists depends crucially on the cost-to-charge ratio applied to convert Medicaid charges to Medicaid costs. States are likely to dispute charges of Medicaid shortfalls by claiming that overall hospital cost-to-charge ratios do not fairly reflect the costs of treating Medicaid patients. As we noted in Issue 5 above, little research has attempted to determine whether cost-to-charge ratios differ across procedures and therefore, because patients covered by different payers use different procedures, by payers. We recommend that such research proceed, along the lines we sketched in Issue 5, before policymakers attempt to calculate Medicaid shortfalls and use them to determine tax esempt status or disproportionate share payments.

This is not to say that participation in Medicaid should not be included in standards for tax exemption and disproportionate share payments. In fact, current federal policies consider Medicaid participation, but not uncompensated care, in determining whether a hospital qualifies for tas esemption or Medicare disproportionate share payments."[33] These policies are based on the number or share of Medicaid patients treated, rather than on Medicaid shortfalls. Until a better measurement of shortfalls can be achieved, standards for tax exemption and disproportionate share payments could easily be expanded to include information on uncompensated care without adding standards for Medicaid shortfalls. Such standards are already in place for Medicaid, where

[33] Currently, the Internal Revenue Service considers operation of an emergency room and participation in Medicare and Medicaid as the two most important factors demonstrating that a hospital provides community benefits (McGovern, 1990). A not-for-profit hospital must provide such benefits to qualify for exemption from federal income taxes. Medicare disproportionate share payments are based on the share of Medicaid and poor Medicare patients treated by a hospital, but not on uncompensated care amounts..

the criteria for disproportionate share payments is based on the weighted sum of Medicaid and charity charges divided by total charges.

9. Should Medicare shortfalls be included in a measure of uncompensated care? (pp. 52-53)

We recommend that Medicare shortfalls should **not** be reported by hospitals as uncompensated care. Medicare shortfalls raise two issues closely related to uncompensated care. First, is there any difference between uncompensated care (payments less than costs by private patients) and Medicare shortfalls (payments less than costs by **Medicare** patients)? Second, if Medicare shortfalls are similar to uncompensated care, how are the shortfalls to be measured? The first issue is conceptual, while the second issue involves the empirical task of determining whether Medicare payments are adequate to cover the costs of treating Medicare patients. Conceptually, we believe that Medicare shortfalls are relevant for standards for tax exemptions and disproportionate share payments which attempt to measure a hospital's contribution towards patients who cannot afford to pay for that care. However, we believe that further research on how cost-to-charge ratios vary by procedure and by payer is necessary before Medicare payment adequacy and, therefore, Medicare shortfalls can confidently be computed. We recommend that such research should be performed. In the meantime, hospitals should report Medicare gross revenue and Medicare deductions from revenue.

Medicare shortfalls raise many of the same questions as Medicaid shortfalls, and our recommendation mirrors these similarities. As described

in Chapter 2, Lewin, Eckels, and Roenigk's (1988) argument that Medicare shortfalls should be considered alongside uncompensated care is consistent with our conceptual definition that uncompensated care represents the hospital's contribution towards care that patients cannot afford to pay for. In practice, however, determining whether a Medicare shortfall exists depends crucially on the cost-to-charge ratio applied to convert Medicare charges to Medicare costs. States are likely to dispute charges of Medicare shortfalls by claiming that overall hospital cost-to-charge ratios do not fairly reflect the costs of treating Medicare patients. As we noted in Issue 5 above, little research has attempted to determine whether cost-to-charge ratios differ across procedures and therefore, because patients covered by different payers use different procedures, by payers. We recommend that such research proceed, along the lines we sketched in Issue 5, before policymakers attempt to calculate Medicare shortfalls and use them to determine tas esempt status or disproportionate share payments.

There is an additional question related to Medicare shortfalls. Medicare prospective payments are intended to cover the cost of treating a patient with a particular diagnosis efficiently. Because a hospital may incur a Medicare "shortfall" by treating a patient inefficiently, policymakers may be reluctant to include such shortfalls in standards for tax esemption or disproportionate share payments. Until a better measurement of Medicare shortfalls can be achieved and the efficiency question resolved, standards for tax exemption and disproportionate share payments could easily be espanded to include information on uncompensated care without adding standards for Medicare shortfalls.

10. Should contractual allowances to private insurers be included as uncompensated care? (p. 54)

We recommend that contractual allowances between hospitals and private insurers not be included as uncompensated care.

Faced with declining occupancy and more cost-sensitive buyers, hospitals have increasingly offered contractual allowances (discounts) to private insurers through such arrangements as preferred provider organizations and health maintenance organizations. By increasing or maintaining market share, such allowances make hospitals better off; therefore, they should not be included as uncompensated care.

11. Should other "free" care be counted as uncompensated care? (pp. 54-56)

We recommend that "free" care not be included in information reported by hospitals as uncompensated care.

Free care consists of services provided by a hospital without charge. As described more fully in Chapter 2, there are three reasons why we recommend against including free care as uncompensated care. First, free care need not be targeted to the poor, violating our first principle of uncompensated care measurement. Second, hospitals may offer "free" services such as screening tests and educational classes as part of a marketing plan to encourage patients to visit their hospital. Finally, because the cost of free care is

included in the cost-to-charge ratio, free care will be double-counted if its cost is also included directly as uncompensated care.

Current Internal Revenue Service require that tax-exempt hospitals provide community benefits. Given this standard, free care might be considered independently of uncompensated care in standards for tax exemption. In this report, we do not provide a full analysis of the merit of basing tax exemption 'on community benefits. We note, however, the problems associated with double-counting. There is also an inherent problem in measuring community benefits, since patients receive benefits (consumer surplus) from services they pay for, as well as from free services.

12. Is the relevant measure of uncompensated care the dollar amount or the fraction of hospital costs? (pp. 56-57)

We recommend that policy decisions consider both absolute levels of uncompensated care and the ratio of uncompensated care costs to total hospital costs.

The absolute level of uncompensated care provides the best measure of hospitals' overall contribution of care to the poor. Nevertheless, standards for tax exemption and disproportionate share payments to individual hospitals are more naturally based on measures which relate the hospital's uncompensated care to its total costs. Therefore, we recommend that a hospital should report its absolute level of uncompensated care costs (or charges), while standards for tax exemption and disproportionate share payments should be based on the ratio of uncompensated care to total costs.

13. Should hospitals be reauired to report separate entries for uncompensated care provided in inpatient, outnatient. and emergency room settings?

(pp. 57-58)

At this time, we do not believe that hospitals consistently distinguish between uncompensated care provided in inpatient, outpatient, and emergency room settings. Therefore, if HCFA chooses to require hospitals to report uncompensated care levels, we recommend that it initially require only reporting of total uncompensated care provided by the hospital. Hospitals might be required to separately classify uncompensated care by inpatient and outpatient settings at a later date.

Ideally, hospitals would report inpatient and outpatient uncompensated care charges separately so that the appropriate cost-to-charge ratio could be used to calculate uncompensated care costs. However, many hospitals apparently do not distinguish between inpatient and outpatient uncompensated care. In Tennessee, one of the few states which collects separate data on inpatient and outpatient uncompensated care, more than two-thirds of hospitals report positive levels of outpatient bad debt and charity care, but other hospitals only report aggregate levels of bad debt and charity care. HCFA's current demonstration project evaluating the use of an expanded Medicare Cost Report should provide important additional information about the ability of hospitals to distinguish between uncompensated care settings.

We found that even hospitals which distinguish between inpatient and outpatient uncompensated care do not do so in a consistent way. Although all of the hospital administrators we interviewed said it was possible for their

accounting systems to separately classify inpatient and outpatient uncompensated care "in theory," the systems differed in their classification of patients treated in the emergency room. Some systems maintained a separate category for emergency room uncompensated care, while others split ER care into its inpatient and outpatient care components or rolled ER charges into inpatient uncompensated'care if the patient were admitted to the hospital. Perhaps the easiest way to increase consistency in reporting across hospitals is to have the guidelines for reporting uncompensated care instruct hospitals to include ER charges for patients subsequently admitted to the hospital as inpatient uncompensated care. Such a classification will probably mean that most uncompensated ER care will be classified as inpatient care, since charges for patients who receive primary care in the ER are usually relatively small compared to charges of patients who are admitted to the hospitals.

Given potential inconsistencies between hospitals and some hospitals' apparent inability to distinguish between inpatient and outpatient uncompensated care, we believe that hospitals should no: initially be required to classify uncompensated care by setting. Instead hospitals would only report aggregate uncompensated care levels. Of course, if hospital accounting, systems evolve to better track uncompensated care, separate classification could be required at a later date.

14. Will hospitals respond to changed reporting resuirements for uncompensated care? (pp. 58-59)

We expect that hospitals will respond to changed reporting requirements for uncompensated care. In particular, reported levels of charity care are

likely to rise and bad debt fall if standards for tax exemption or disproportionate share payments are based on charity care alone.

Economic theory suggests, and our interviews and analysis of uncompensated care data in Florida and Tennessee confirm, that hospitals respond to changing incentives for reporting uncompensated care data. In Vermont, where a previously tax-exempt hospital was presented with a municipal tax bill, hospitals began reporting higher levels of charity care and lower levels of bad debt, according to the executive director of the state's data collection agency. The hospital directly involved in the tax battle had previously made little effort to distinguish its charity care from its bad debt. Massachusetts officials report that charity care rose as a fraction of uncompensated care when the state adopted a risk pool which reimburses hospitals on the basis of charity care alone. Similarly, Florida data show a relative increase in charity care when the state adopted a risk pool based solely upon charity care. In Tennessee, charity care as a fraction of overall uncompensated care increased noticeably between 1985 and 1987, when the state began to make Medicaid disproportionate share payments to hospitals. Although based on overall uncompensated care levels, the standard was accompanied by clearer instructions guiding how hospitals could distinguish between charity care and bad debt.

The obvious lesson that hospitals will respond to changed reporting incentives has several important implications for policymakers, because most hospitals currently face few incentives for accurately distinguishing between charity care and bad debt. First, policies should be based on prospective rather than retrospective rates of uncompensated care. For example, hospitals

should not be handed a tax bill based on past low levels of charity care if they previously had no reason to distinguish between bad debt and charity care. Second, as explained in Recommendation 2.c., standards which distinguish between bad debt and charity care should give hospitals clear guidelines for making this distinction. Third, policies which use uncompensated care to determine tax exemptions or disproportionate share payments should avoid discontinuities in the payoffs from reporting uncompensated care. Discontinuities greatly increase the marginal gains from reducing collection effort or overstating uncompensated care. Finally, to limit hospitals' incentives to reduce collection efforts, disproportionate share payments and the values of tax exemption should not be set too high. The intent of basing tax exemption and disproportionate share payments on uncompensated care is to increase access by patients who cannot afford to pay for their care, not to reduce payments by patients who can be compelled, with effort, to pay for their care.

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