Taxation of Nonprofit Hospitals: A Cost Impact Model
Potter, Margaret A
Hospital & Health Services Administration; Spring 1992; 37, 1; ProQuest Central
pg. 89

Taxation of Nonprofit Hospitals: A Cost Impact Model[1]

Margaret A. Potter is Associate Director in the Health Policy Institute and Research Assistant Professor in the Health Services Administration Department, Graduate School of Public Health, University of Pittsburgh, Pennsylvania.

Summary

At a time when taxing authorities at all levels of government are reexamining present exemptions, nonprofit charitable hospitals may become concerned about potential new tax liabilities. The Tax Impact Model described here can predict the dollar amount of new taxes, the probable amount of shortfall in major payers' reimbursement for these expenses, and the resulting net financial impact. This model incorporates a set of issues that should be considered and factors for which data or assumptions are needed. It can be applied to hospitals singly or in groups. Here, the model's application to a single hospital shows that payer mix and pretax financial strength are important determinants of the impact of taxation. These findings also suggest that hospitals with a large disproportion of Medicare and Medicaid patients, and those with small revenue margins, are least able to absorb new tax expenses.

Address correspondence and requests for reprints to Margaret A. Potter, J.D., Associate Director, Health Policy Institute, Graduate School of Public Health, University of Pittsburgh, 130 DeSoto Street, Pittsburgh, PA 15261.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com

Nonprofit hospitals are, by definition, excluded from state and local taxes computed on the basis of "profits." Further, these organizations have usually been accorded the status of charities, which exempts them from federal income taxes, state sales taxes, and local real property taxes. Nevertheless, recent political and judicial developments may lead a hospital to question what its tax liabilities would be if it were legally no longer a nonprofit charity. In Utah, Pennsylvania, and Texas, authorities are redefining criteria for charitable tax exemption of hospitals. A recent report of the U.S. General Accounting Office (1990) suggested that Congress should consider changing the present liberal rules by which hospitals qualify as charitable organizations for federal tax purposes. Even without a change in tax laws, a nonprofit hospital experiencing financial strain might consider the sale of assets or the conversion to for-profit status—these are other cases in which it would want to estimate its potential tax expenses.

Finally, information about the cost impact of taxation in nonprofit hospitals could be useful in policy analysis. Analysts considering whether the tax status of these institutions should be maintained have previously assumed that the cost of losing tax exemptions would be either insignificant ("not. . .large amounts of money" Falcone and Warren 1988) or easily absorbed by being passed on to the hospitals' payers (Pellegrini 1989). However, these assumptions in the absence of supporting studies remain questionable.

In considering how new taxes will affect costs, a hospital or policy analyst would want to know the following:

- What would be the dollar amount of a particular tax from which the hospital is now wholly or partially exempt or excluded?
- What portion of this dollar amount would likely not be reimbursed by its various government and private payers?
- How great an impact would this nonreimbursement have on the hospital's financial status?

This article presents a model designed for spreadsheet software to answer these questions. A description of the model's components and assumptions and an illustration of its application to a hypothetical hospital follow. The final section discusses the purposes and limitations of this model.

The Tax Impact Model: Components and Assumptions

The Tax Impact Model incorporates data, tax law, accounting procedures, and reimbursement assumptions necessary to compute the cost impact of a loss of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com

exempt status on a given hospital (or group of hospitals) at a specified point in time. The model's components include specifications for taxing jurisdictions; legal analysis of relevant taxes and exemptions; tax rates and valuation bases; hospital financial, utilization, and physical plant data and characteristics; and the contracts and regulations governing potential reimbursement for new tax expenses by patients and third party payers. The model generates predictions of financial impact in terms of changes in revenue margin and residual income. Throughout this discussion, the model includes only the hospital, as distinct from its sister corporations in the typical reorganized structure.

Taxing Authority and Exemption Revocations

The Tax Impact Model recognizes the several tax authorities to which a given hospital is subject and the particular exemption revocations that could affect it. The model also accounts for the fact that a single basis for exemption, such as state nonprofit status, may relate to more than one tax. Consequently, groups of taxes that have a common basis for hospital exemption or exclusion are linked (that is, imposed simultaneously) in the model's predictions.

First, loss of federal tax-exempt status under Internal Revenue Code section 501(c)(3) would result in liability for the federal income tax. The model can account for this tax separately from any other federal tax[2] or any state or local tax because loss of 501(c)(3) status would not necessarily affect other tax exemptions.

Next, loss of state nonprofit status would result in liability for state income taxes and perhaps others. Although states differ, for this discussion assume a Pennsylvania location. Hence, a hospital's nonprofit status is also the basis for exclusion from a capital stock tax, which is an annual assessment on the net worth (rather than net income) of a corporation. As of 1987, more than one-half of the states had such a tax (Prentice-Hall Tax Information Services 1987). The model links the imposition of state income tax with other corporate status–related taxes such as the capital stock tax. On the other hand, the model does not link federal income taxes with these state taxes. This is because states determine nonprofit status independently of the federal government, although for hospitals the two determinations may concur.

Third, a hospital's exemption from sales taxes, real estate taxes, and others is defined by a state standard of charitability different from that of the federal tax code and distinct from state nonprofit status. In Pennsylvania, another such tax is the gross receipts (or business privilege) tax imposed by some municipalities.[3] Each state has its own legal definition of the charitable exemption; in some states, nonprofit hospitals have enjoyed a special category based on their mission of care for the sick. Nonprofit status is a prerequisite for charitable

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com

exemption, so the Tax Impact Model links a loss of nonprofit status with a loss of charitable exemption. Conversely, loss of charitable exemption does not necessarily impair nonprofit status, so the model can test the impact of sales, real estate, and gross receipts taxes without including income and capital stock taxes.

Sales taxes require special attention because exemptions may apply not only to institutions but also to the items bought and sold. Sales tax laws in some states exclude certain classes of goods and services, regardless of whether the purchaser is or is not an exempt charity. Thus, a hospital losing its charitable exemption would become liable for sales taxes only for purchases of nonexcluded items. Another consideration for sales taxes is to assign liability only to the responsible taxpayer. When the hospital is merely the conduit for sales tax revenue from, say, a gift-shop purchaser to the state, this revenue is not includable in the model because the hospital itself incurs no additional tax liability.

Tax Computations

The computation of tax liabilities depends both on the rates of tax and on the value of the taxable property, given appropriate deductions, depreciation, and other allowances. Whenever possible, actual calculations of estimated tax liabilities (such as for federal and state income taxes) are desirable. Since present federal law permits the deduction of state taxes from federal net income, the net income–taxable base determinations for these two taxes should be made separately. Because accounting conventions of nonprofit and for-profit organizations differ, some tax computations might require modification when applied to nonprofit hospitals' financial data. For example, Pennsylvania's capital stock tax is based on a five-year average of "net worth" (see note to Table 1), for which a nonprofit hospital might substitute its "fund balance" as a rough equivalent.

Real estate taxes present a particular valuation problem. Although a property's market value is the typical starting point, this value may be speculative for hospitals, which are bought and sold infrequently and are not necessarily comparable in value to commercial properties of similar size and location. Local assessment records may be inadequate when not updated after acquisition—sometimes in the distant past—by the exempt organization. The "book value" of land and buildings as shown on financial statements represents depreciated historical cost, potentially well below a value agreeable to the local tax assessor. Another valuation method used for commercial real estate would account for the property's income stream or potential, but for a nonprofit hospital this might be too speculative. An alternative that recognizes some of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com

the unique characteristics of hospitals is to estimate building value using a replacement cost estimation methodology (Erikson 1989)[4] and to estimate land value by extrapolation from building value (McCowan 1989).[5]

Hospital Data and Characteristics

When a single hospital's potential tax liability is modeled, historical or present data on its utilization, revenue, expenses, and financial status are needed. Thus, a detailed financial profile that includes revenue, expenses, and assets of the subject hospital should be included in the model.

When hospital groups are modeled, the same data is needed for the individual institutions, either separately or in aggregate. Additionally, the composition of groups should be based on institutional characteristics likely to affect total tax liability or ability to absorb new tax expenses. For example, location determines which taxing authorities a hospital is subject to, which in turn determines tax rates and sometimes valuation of the tax base. Payer mix is important because each major payer reimburses according to different rules. Hospitals with a higher proportion of charge-based private payers can probably expect reimbursement for a higher percentage of new tax expense than hospitals with a predominance of discount or government payers. Teaching status should be taken into account since this can affect the intensity and costliness of resources used in patient care, which in turn can affect space needs and consequently real estate taxes. Also, higher Medicare reimbursement (the diagnosis-related group indirect medical education rate adjustment) may allow certain teaching hospitals greater latitude to absorb new tax expenses.

Reimbursement

The Tax Impact Model incorporates the regulations, contract provisions, and hospital policies (such as cost-to-charge ratio) that determine whether and to what extent new tax expenses will be reimbursed. It can also be programmed to test various management alternatives for how the institution might absorb or recoup otherwise unreimbursed tax expenses, such as by disproportionately raising prices to charge-based payers or by instituting cost-saving measures.

To determine the extent to which new tax expenses would remain unreimbursed without management intervention, the model incorporates: (1) a method of apportioning total new tax expense among payers; (2) an allocation to each payer of an "ideal" percentage of total tax expense; (3) each payer's rules limiting actual tax-expense reimbursement; and (4) measurements of the financial impact of unreimbursed tax expenses.

One method of apportioning tax expenses among payers is based on total charges attributed to each before allowance for contractuals, bad debt, or

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com

other deductions. Although charges do not accurately reflect each payer's proportionate contribution to revenues, the purpose here is to apportion tax expenses among the payers according to the total patient care resource consumption of each. Charge data reflect resource consumption by payer more accurately than some readily available utilization statistics, such as patient days or admissions. Neither of these statistics includes outpatient utilization, although payer-specific adjustments of outpatient visits to inpatient-day equivalents is possible (American Hospital Association 1990). On the other hand, it is likely that within a given hospital, charges will be set consistently for a given service for all payers using constant cost-allocation assumptions. Charges are not necessarily indicative of proportional utilization by payer in all hospitals at all times. Nevertheless, proportion of total charges is a reasonably accurate approximation.

The model next differentiates among each payer's rules concerning reimbursement of specific tax types. Medicare, for example, excludes reimbursement clearly for income-based taxes[6] and probably also for gross receipts–based taxes. Medicare allows reimbursement for capital asset–based taxes (such as real estate taxes) but only after a 15-percent discount.[7] Tax expenses not specifically mentioned in Medicare reimbursement regulations, such as sales and capital value taxes, might nevertheless be reimbursable to some extent, subject to interpretation by Medicare authorities.

A similarly detailed analysis of the reimbursement rules of other payers should be programmed into the model. For charge-based payers including uninsured and self-paying patients, new tax expenses could be assumed to receive full proportional reimbursement. However, this assumption could result in an underestimate of reimbursement from this group because in any given hospital the mark-up of expenses (costs) to charges could be more than enough to cover for the expected bad debt and charity care costs generated by this payer group.

Application of the Model to a Hypothetical Hospital

To illustrate how the Tax Impact Model works, a fictional, 107-bed nonteaching hospital has been created from aggregated data. "Community Hospital" is a nonprofit, charitably exempt facility located in a small Pennsylvania city. Here, taxes and reimbursements are calculated as if paid in fiscal year 1988.

According to Community Hospital's financial statement,[8] its fiscal year 1988 net patient revenue was $19,716,000, and its other operating revenue was $546,000. Its net operating revenue was $20,262,000. Its operating expenses

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com

totaled $17,675,000, including salaries and benefits of $11,263,000. Of its other operating expenses, 21 percent are assumed to be subject to the Pennsylvania sales tax (that is, not excluded from the tax as "necessities"). Its capital expenses were $1,751,000. This resulted in net operating income of $836,000, which along with nonoperating income, brought its residual income to $1,251,000. Community Hospital's closing fund balance was $12,168,000.

Its buildings were valued at $24.2 million and the land at $2.7 million, for a total real estate value of $26.9 million. Of this hospital's fiscal year 1988 charges, 49 percent were for care rendered to Medicare patients, 9.5 percent for Medicaid, 21.5 percent for Blue Cross, and 20 percent for all other private payers.

Reimbursements are constrained as follows: Medicare will pay only for its share of the capital stock and real estate taxes, subject to a 15-percent discount; it will not reimburse sales, income, or gross receipts tax expenses. Medicaid will make no reimbursement for new tax expenses. Blue Cross and other private payers will each pay their full share of new tax expenses.

Three taxation scenarios are tested here, each representing a progressively heavier tax burden due to the loss of an additional exemption. Under Scenario A, Community Hospital loses its status as a charity under Pennsylvania law, resulting in liability for county, municipal, and school district real estate taxes, the state sales tax, and a municipal gross receipts tax. In Scenario B, the hospital loses its nonprofit status under Pennsylvania law, resulting in liability for the state's corporate income tax, its capital stock tax, and (because nonprofit status is a prerequisite for charitable exemption) all of the Scenario A taxes. In Scenario C, Community Hospital loses both its state nonprofit status and its federal 501(c)(3) status, so that all state and federal taxes are imposed.

The model's predictions for the tax impact of each scenario on Community Hospital are shown in Tables 1–3. Table 1 shows the dollar amount of tax liabilities, given the rates of tax in effect in Pennsylvania and those assumed for this hospital's urban location.[9] Scenario A taxes total $4,080,560. To that sum, Scenario B's income and capital stock taxes add $43,830 and $100,853, respectively, and its gross receipts tax increases for a total of $4,225,396. Under Scenario C, the federal income tax of $185,232—along with increased state income and gross receipts taxes and a decreased capital stock tax—brings the total to $4,417,147. In all scenarios, the real estate tax liability is by far the heaviest, representing at least 90 percent of the total.

It should be noted that these federal and Pennsylvania corporate income taxes were calculated without considering appropriate deductions and allowances, thus predicting much higher tax liabilities than would probably be imposed. The purpose here is to illustrate how the Tax Impact Model works,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com

Table 1
Community Hospital's Tax Liability under Each Scenario

Tax and Rate	Scenario A	Scenario B	Scenario C
Federal income (34 percent)	—	—	185,232
State income (8.5 percent)	—	43,830	50,610
Capital stock (9.5 mills*)	—	100,853	100,474
Sales (6 percent)	80,820	80,820	80,820
Real estate (188.5 mills)	$3,963,708	$3,963,708	$3,963,708
Gross receipts (1.5 mills)	36,032	36,185	36,304
Total	$4,080,560	$4,225,396	$4,417,147

*Millage is applied to five-year average net worth as determined by a formula applied to the value of capital stock that is fixed by Pennsylvania law. For this model, fund balance has been substituted for net worth in the formula.

rather than to predict what actual taxes for this hypothetical hospital would be.

The real estate and sales tax amounts remain the same under all three scenarios, but the gross receipts tax amount increases progressively from Scenario A through Scenario C. The reason for this is the gross receipts value base. Reimbursement for the additional taxes imposed under each subsequent scenario raises the hospital's gross receipts from those of the preceding scenario. Reimbursement for additional tax expenses also explains why the state income tax is higher under Scenario C than it is under Scenario B. The larger net loss occurring in Scenario C, which reduces the hospital's net worth or fund balance, explains why the capital stock tax is lower in Scenario C than in Scenario B.

Table 2 presents the hospital's ideal allocations and actual tax-expense reimbursements for each major payer class and for each scenario. The ideal reimbursements are the equivalent of each payer's percentage of the payer mix (as stated above) as applied to the total tax expense for the scenario. In all three scenarios, Medicare's actual reimbursement falls short of its ideal tax expense allocation based on its share in the payer mix. Under Scenario A, the shortfall is 17 percent; under Scenarios B and C, the shortfalls increase to 18 and 22 percent, primarily because of the addition of income- and gross receipts–based taxes that Medicare would not reimburse. Since we assume that Pennsylvania Medicaid regulations will not permit reimbursement for any new tax expenses, all three scenarios show a 100 percent shortfall for this payer. Our assumptions for both private-payer classes (Blue Cross and others) result in a 0 percent shortfall for them. It is important to note, however, that even the relatively

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com

Table 2
Community Hospital's Tax Reimbursement by Payer under Each Scenario

Scenario	Medicare	Medicaid	Blue Cross	Other Private Payers
A. Loss of charitable exemption				
Ideal allocation	$1,997,072	$388,300	$881,634	$813,554
Reimbursement	1,648,901	0	881,634	813,554
Percent shortfall*	17	100	0	0
B. Loss of state nonprofit status				
Ideal allocation	2,067,957	402,082	912,927	842,430
Reimbursement	1,690,856	0	912,927	842,430
Percent shortfall*	18	100	0	0
C. Loss of state and federal nonprofit status				
Ideal allocation	2,161,802	420,329	954,356	880,660
Reimbursement	1,690,698	0	954,356	880,660
Percent shortfall*	22	100	0	0

*Difference between reimbursement and ideal allocation, divided by the latter.

small percentage shortfall by Medicare produces a relatively large dollar-amount shortfall because of this payer's dominant share in Community Hospital's payer mix.

Table 3 shows the impact of unreimbursed taxes on Community Hospital's financial profile for fiscal year 1988. Residual income is reduced by substantial percentages under all three scenarios, from −58.9 percent in Scenario A to −71.3 percent in Scenario C. The hospital's fiscal year 1988 operating margin drops to less than 1 percent under all three scenarios, and most sharply under Scenario A, although in all scenarios the decline is between 80 and 90 percent. Total revenue margins are cut by about two-thirds or more in all three scenarios.

An apparent anomoly is seen in comparing the change in operating margin among scenarios. Even though the tax burdens are lowest under Scenario A, here the change in operating margin appears greatest. The explanation lies in the model's allocation of income tax expenses and reimbursement revenue in Scenarios B and C. Specifically, an income tax expense is allocated between operating income and total income in proportions consistent with the ratio of operating income to total income. Reimbursement revenue is not subject to this kind of apportionment but rather is fully allocated to operating income. Thus, since the calculation of operating margin excludes the portion of tax

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com

Table 3
Impact of Unreimbursed Taxes on Community Hospital's Financial Status under Each Scenario

Financial Indicator	Scenario A	Scenario B	Scenario C
Percent change in residual income	−58.9	−62.3	−71.3
FY 1988 operating margin			
Without taxes	4.1	4.1	4.1
With taxes	0.4	0.8	0.8
Percent change	−89.8	−80.9	−81.1
FY 1988 total revenue margin			
Without taxes	6.1	6.1	6.1
With taxes	2.1	2.0	1.5
Percent change	−64.6	−67.7	−75.4

expenses charged against income, revenue appears to more than offset the tax expense. This accounting effect disappears from the total revenue margin figures shown on Table 3 because for this calculation the full tax expense amount is included in Scenarios B and C, as well as A.

Discussion

The components and predictions of a computerized Tax Impact Model for nonprofit, tax-exempt hospitals have been described. In considering its application, the model's purpose and limitations should be borne in mind. Its purpose is to show in detail the data, assumptions, and tax law issues that should be addressed in making projections of potential future tax liability for tax-exempt hospitals. As illustrated here, it does not purport to show complete, fully accurate tax liability predictions. Maximum accuracy in the projection of tax liabilities would require an institution-specific preparation of tax returns with computation and inclusion of all allowable deductions and exclusions.

The valuation of taxable assets is another significant determinant of accuracy. For the real estate tax, this is a particularly important issue because it represents a relatively heavy liability, but lacking a recent assessment by the taxing jurisdiction, the value of hospital real estate for tax purposes may be uncertain. Relatively minor adjustments in real estate valuation could change substantially the model's predictions for this tax and therefore for the overall cost impact of taxation. Several of the valuation methods suggested here should be tested separately in the model to produce a range of credible estimates.

Reimbursement assumptions should be reviewed and revised for future applications of this model. Medicare regulations may change annually. Each

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com

state defines its own Medicaid reimbursement methodology, and these too can be changed from time to time. The same is true of private payers except perhaps those that are purely charge-based and can therefore be expected to reimburse the hospital their full share of new tax expenses.

Finally, all assumptions programmed into the model should be validated by financial experts and accountants familiar with taxation and reimbursement—ideally of for-profit hospitals—in the relevant jurisdictions.

Subject to these limitations, the Tax Impact Model provides a useful tool for a number of applications. First, the model can estimate the value of a hospital's present exemptions. The Internal Revenue Service, the U.S. Congress, and some states are currently considering changes in charitable exemption law that would require community services from the hospital valued in relation to foregone tax revenues (Cooper 1990; Utah State Tax Commission 1990).[10] The model can be used to provide a dollar amount for the tax side of such an equation.

Second, the model can reasonably estimate the potential financial effects of a tax-exemption loss on a single hospital. This estimate can assist the organization in planning for a voluntary conversion to for-profit operation as well as in dealing with legal challenges to present tax-exempt status. The model can also be used to test whether specified new operational efficiencies or other cost-cutting strategies could help a hospital to better absorb unreimbursed tax expenses.

Third, the model can be adapted for application to groups of hospitals using either aggregated or disaggregated data. This could allow for determination of the likely financial impact of taxation on all the hospitals within a given city, county, or state. Similarly, the model could be used to estimate the amount of revenues foregone by a taxing jurisdiction due to a particular exemption favoring hospitals.

The model can also be used to help answer questions of interest to tax and health policy analysts. To answer questions about the implications of taxation on nonprofit hospitals would require applications of this model on a broader scale than the scope of this article permits.[11] However, this limited demonstration of the model does begin to suggest several policy issues that merit further consideration. Among these, the model illustrates the relative amounts of various taxes and how their interactive financial impacts can create revenue shifts between levels of government. In our hypothetical hospital, for example, Medicare and private-payer reimbursement for (primarily) real estate taxes raised total revenues, thus increasing the base for a municipal gross receipts tax.

The model can demonstrate the effects of inconsistent tax exemption law changes among states, which may become a concern as Medicare reimbursement moves closer to fully national prospective reimbursement for capital as

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com

well as operating expenses. A hospital required to pay taxes because of its failure to meet the relatively strict exemption standard in its state could have significantly greater expenses than a similar hospital in a different state with a more liberal exemption standard. Present Medicare reimbursement does not take into account disparities in state tax laws, thus creating a possibility of systematic underreimbursement of hospitals in states with strict exemption standards.

Other preliminary conclusions about the impact of tax expenses on private nonprofit hospitals are also suggested by this demonstration. Two factors apparently affect an individual hospital's ability to absorb new tax expenses—payer mix and pretax revenue margins. Community Hospital's revenue shortfall would have been less had its payer mix been less dominated by Medicare and Medicaid. These government payers can impose more severe constraints on reimbursement than private payers. Second, had this hospital's pretax operating margin been only slightly lower, new tax expenses under all three scenarios could have forced it into an operating deficit. Taken together, these two findings suggest that new taxes could be financially most damaging to hospitals with currently slim margins due to their serving large populations of the elderly and the poor.

Another preliminary observation from this demonstration is that real estate taxes are likely to impose a more costly burden than income-based taxes. Real estate taxes are not only a more costly prospect for nonprofit hospitals, they are also more likely. Exemption challenges being made or proposed at both the state and federal levels in recent months tend to focus on charitable standards rather than on nonprofit status. Newly restrictive standards of charitability, and their implications for financial viability, should therefore be a focus of concern for these institutions.

Acknowledgments

Two recent fellows of the Health Policy Institute are credited, with thanks, for converting a purely conceptual Tax Impact Model to the operational form of spreadsheet software. They are James N. Smith and Anthony DeFurio. The author also thanks Franklin McCarthy and three anonymous reviewers for their valuable comments and suggestions.

Notes

1. This article was derived from research reported in a Health Policy Institute monograph, *The Tax Exempt Status of Western Pennsylvania Hospitals: Bases for Exemption; Implications of Change,* HPI Policy Series #16, Graduate School of Public Health, University of Pittsburgh, April 1990.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com

2. The federal excise tax on private foundations would generally not apply either to a charitable nonprofit hospital or a for-profit (nonexempt) hospital.

3. A gross receipts tax, like the Pennsylvania business privilege tax, is a mirror image of the sales tax: while based on gross sales or receipts like a sales tax, it is imposed on the seller rather than on the purchaser.

4. Erikson (1989) said that in computing new construction costs for a hospital, one could reasonably assume that each bed requires 1,100–1,400 square feet, recognizing that actual support and ancillary service space requirements can vary more than this range suggests. He placed construction costs in a range beginning with $145 per square foot in rural areas through $162 in middle-cost areas, to $175 for tertiary hospitals in high-cost areas. Thus, new construction costs of buildings could be estimated by multiplying beds by square footage per bed by cost per square foot. For market valuation, the resulting cost estimate should be reduced by a depreciation factor.

5. McCowan (1989) said that for Western Pennsylvania, undepreciated building value is roughly related to the total real estate value at a ratio of 8:10 in metropolitan counties and 9:10 in other counties. Thus, once building value is known, a total value for hospital real estate can be obtained by dividing that value by 0.8 or 0.9. Land value would then be the difference between total real estate and building values. Elsewhere in the country, McCowan's ratios might be unreliable, and local appraisers could be asked to suggest alternative ratios.

6. 42 *Code of Federal Regulations*, at section 412.134(h)(5).

7. 42 *United States Code*, at section 1395ww(g)(3)(A)(iv), May 1989 *Cumulative Supplement*. Under the Omnibus Budget Reconciliation Act (OBRA) of 1990, the Medicare reimbursement rate for hospital capital expenses will remain 85 percent in fiscal 1991 but will increase to 90 percent for fiscal years 1992–1995.

8. This financial statement was derived from audited fiscal year 1988 data collected from a group of nonteaching urban hospitals and aggregated by Blue Cross of Western Pennsylvania.

9. The local tax rates used are similar to those of actual Pennsylvania jurisdictions.

10. See *St. Luke's Hospital v. Board of Assessment Appeals*, Court of Common Pleas of Lehigh County, Civil Division-Law No. 88-C-2691, Order and Opinion of 19 April 1990.

11. For a more complex, policy-oriented application of the Tax Impact Model, see the study cited in Note 1. In that report, hospitals of various size, location, and teaching status are compared for their ability to absorb new tax expenses.

References

American Hospital Association. *Hospital Statistics, 1990–1991.* Chicago: The Association, 1990.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com

Cooper, Stephen K. "IRS Locks Gaze on Charity-Care Levels." *HealthWeek* 4 (5 November 1990): 4.

Erikson, Doug. American Hospital Association Facilities Management Group. Personal communication, 2 October 1989.

Falcone, David, and David G. Warren. "The Shadow Price of Pluralism: The Use of Tax Expenditures to Subsidize Hospital Care in the United States." *Journal of Health Politics, Policy and Law* 13, no. 4 (Winter 1988): 735–45 and Appendix.

McCowan, D. L. President of Dan McCowan, Inc., and of the Pittsburgh and Western Pennsylvania Chapter 13 of the American Institute of Real Estate Appraisers. Personal communication, 27 October 1989.

Pellegrini, Dan. "Hospital Tax Exemption: A Municipal Perspective." *Frontiers of Health Services Management* 5, no. 3 (Spring 1989): 44–46.

Prentice-Hall Tax Information Services. *All States Tax Handbook.* Paramus, NJ: Prentice-Hall, 1987.

U.S. General Accounting Office. *Nonprofit Hospitals. Better Standards Needed for Tax Exemption.* Report to the Chairman, Select Committee on Aging, House of Representatives. GAO/HRD-90-84, Washington, DC. May 1990.

Utah State Tax Commission. "Proposed Nonprofit Hospital and Nursing Home Charitable Property Tax Exemption Standards." 22 August 1990. (Copies available from American Hospital Association, Chicago.)

Wolfe, Christine. Arthur Andersen and Co., Pittsburgh. Personal communication, 10 October 1989.

This article, submitted to the Journal September 5, 1990, was revised and accepted for publication December 13, 1990.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission. www.manaraa.com