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Robert C. McCormack

J. Thomas Presby

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Recommended Citation

Tempo, Vol. 18, no. 3 (1972/73, winter), p. 23-26

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FINANCING HOSPITAL EXPANSION

by Robert C. McCormack and J. Thomas Presby

To adapt to a changing medical environment, hospital trustees and managers are continually striving to modernize existing facilities to provide new services. Usually this modernization process evolves over a period of years and only rarely does a hospital undertake a significant capital expansion program. Consequently, when it becomes necessary to expand, even the most experienced and sophisticated hospital managements and boards find themselves unprepared for planning, designing, financing, constructing, and equipping an addition to their facilities. Since most hospital board members serve in a part-time capacity and have careers of their own which require attention, the careful and detailed planning which should be completed before attempting to finance and construct hospital expansions often is not given sufficient attention.

A hospital's expansion program usually begins with the observation that the historical utilization rate has been high and therefore an addition to the bed-complement is needed. The parameters for an expansion plan are then developed, reviewed, and adopted by the board.

Next, an architect is commissioned to prepare a set of plans for the addition of a certain number of beds. When the architect has completed his assignment and estimated the construction costs, only then does the board focus on the financing aspect of the problem.

At this point, the goodwill of the hospital board members is called upon to assist in the financing. But how often is an orderly examination of the financing alternatives made with an analysis of the pros, cons, and costs of each method?

Operating plans and projections are usually prepared to satisfy the minimum requirements set by the favored lender. But how often are such projections used in planning the expansion itself?

Heretofore, the unnecessary costs associated with such an ill-conceived expansion program have been recovered from third-party reimbursement agencies and

Student housing project completed recently at Research Hospital and Medical Center in Kansas City, Missouri, cost one-and-one-half million dollars.

private patients. In the future, however, attention will be focused on the health care delivery system. The wide discrepancy in per diem costs among competing hospitals, the unnecessary duplication of facilities, and the excess bed capacity that exists in some areas will be recognized and no longer subsidized. To meet the challenge of providing the finest medical care at the lowest possible cost, those responsible for the health care delivery system; doctors, administrators, boards of trustees and various health officials; must be cognizant of the changing climate.

Basic Planning for Expansion

As for any capital expenditure, proper planning of hospital expansion depends on thorough investigation, consultation, and review. First, an analysis of patient records is necessary to determine the hospital's service area. Next, the demographics of both the primary and secondary service areas should be studied to determine the composition and trends of the population with regard to age, sex, income distribution, and geographic location. The U.S. Census reports are the basic sources of this data, but significant supplemental data can be obtained from schools, utilities, and governmental planning agencies.

The historical utilization rates should then be analyzed to determine how efficiently the existing facilities have been used. This study should be conducted on a departmental basis and should include the ratio of beds per service area, the average length of stay per patient, the average daily patient population and occupancy rates, and the ratio of patient days and admissions to total population.

After the basic data have been compiled, projected utilization rates should be applied to the projected census data to determine the expected demand for beds and services. It is important to note that no standard formula can be used to project future needs, and chang-

ing medical practices must be carefully considered. The trend to shorter average stays in hospitals and a greater reliance on outpatient care, for example, will certainly have a bearing on future demand for hospital beds.

A hospital planning an expansion should also consider the availability of health care professionals and the institution's ability to attract a proper mixture of medical staff sufficient to generate the patient base-load for supporting the hospital's operations. Careful analysis must be given to other institutions in the area to determine the present competitive situation as well as these institutions' future plans.

Thus far, the planning process has included:

- identifying the service area,
- analyzing the demographic characteristics of the service area,
- analyzing in detail the hospital utilization rates,
- analyzing historical and anticipated utilization rates and using them to project bed needs,
- adjusting projected needs to reflect trends such as shorter average length of stay and the shift to outpatient services,
- reviewing operations and plans of competitive institutions,
- determining the availability of desired medical staff,
- synthesizing the above and determining the allocation of resources (e.g., doctors, money) that can best serve the needs of the community,
- analyzing alternative methods of financing.

When the hospital's pro forma demands have been established, the needs can be translated into a facilities plan. Using this plan, the construction and equipment costs of the project can be developed and then the operating and financial projections can be prepared.

Financial projections consist of an analysis of the rev-

ALTERNATIVE METHOD	AVAILABLE TO	AMOUNT OF LOAN	TYPE OF LOAN	COSTS WHICH MAY BE INCLUDED IN MORTGAGE	TERM	INTEREST RATE	FEES	TYPE OF SECURITY	MORTGAGE / LENDER	CERTIFICATE OF NEED	FEASIBILITY STUDY
(I) Hill-Burton programs											
(a) grants	non-profit hospitals or public hospitals	set by individual state based on federal allotment	not applicable	not applicable	not applicable	not applicable	not applicable	not applicable	not applicable	not applicable	not applicable
(b) direct loans	public agencies or private non-profit institutions able to issue tax-exempt securities	same as above except combined HEW loan and grants cannot exceed 90% of project costs	construction and permanent	construction and related costs may be included; does not allow interest during construction or any finance costs	25 years	prevailing rate less 3% subsidy	none	first lien; will assume a junior position to another federal loan	U.S. Government	required where applicable, otherwise project must conform to state plan	feasibility study by HEW
(c) guaranteed loans	non-profit hospitals	same as above except combined HEW loan and grants cannot exceed 90% of project costs	construction and permanent	construction and related costs may be included; does not allow interest during construction or any finance costs	25 years	prevailing rate less 3% subsidy	fee for placing loan that is negotiated between hospital and its agent	first lien; will assume a junior position to another federal loan	private financial institutions	required where applicable, otherwise project must conform to state plan	feasibility study by HEW
(II) Tax-exempt bonds	non-profit hospitals where state laws permit and municipal hospitals	determined by amount of debt hospital can carry	construction and permanent	not limited by the particular method of financing, but would be a function of hospital's debt capacity	25 to 40 years	prevailing market rate for tax exempt bonds	fees and expenses associated with a public underwriting	first mortgage and/or pledge of revenues	public debt market	required where applicable, otherwise project must conform to state plan	feasibility study by an independent expert
(III) Taxable first mortgage bonds	all types of hospitals	function of amount of debt lenders feel hospital can carry	construction and/or permanent	not limited by the particular method of financing, but would be a function of hospital's debt capacity	25 years	prevailing market rate for taxable bonds	placement fees, legal expenses, commitment fees, and related fees	first mortgage	public market or private placement with financial institutions	required where applicable, otherwise project must conform to state plan	feasibility study by hospital or an independent expert
(IV) FHA insured mortgage											
(a) Sec. 242 FHA mortgage insurance	private non-profit and proprietary hospitals	\$50 million and cannot exceed 90% of project costs	construction and/or permanent	up to 90% of the replacement cost of mortgage	25 years	coupon (currently 7%) set by HUD; present market rate exceeds 7%; effective cost raised by discounting loan to market rate; discount depends on whether loan is sold to private investors or FNMA	1/4% per annum insurance fee, FHA fees amounting to \$8 per \$1,000 of face value of mortgage, placement fees, and related fees	first mortgage	any FHA approved lender	required from state Hill-Burton Agency	feasibility study by HEW
(b) Sec. 242 FHA insured mortgage used as collateral for a Government National Mortgage Association modified pass-through security	same as above except where indicated	\$50 million and cannot exceed 90% of project costs	construction and/or permanent	up to 90% of the replacement cost of mortgage	25 years	same as above except that marketability of GNMA securities results in a more favorable interest rate and lower discount	GNMA application fee, annual GNMA guarantee fee, plus fees associated with FHA method	government guarantee	private investors and financial institutions	required from state Hill-Burton Agency	feasibility study by HEW
(V) Lease financing	all types of hospitals	function of ability of hospital to support debt	facilities leased to hospital	not limited to any specific costs	up to 25 years	not applicable but lease must be approved by Blue Cross and other reimbursement agencies as meeting reasonable cost criteria	included in lease package	not applicable	not applicable	required where state law dictates a Certificate of Need	not required but economic feasibility of project must be clearly demonstrable

SOURCE: Dillon, Read & Co., Inc. and Touche Ross & Co.

enue and expense profile of the new facility as well as an analysis of the anticipated cash flows and fund requirements. With the aid of computer simulation models, the variables can be interchanged to answer questions concerning the effects of such situations as lower-than-projected occupancy rates. The expense projections are constructed based on the given fixed costs (building and equipment) plus the associated variable costs such as staffing levels, the supply usage rate, and other items that can be adjusted within a certain range to match given levels of occupancy rates.

The revenue side of the profile is an extension of the estimated patient population multiplied by the schedule of charges. In developing the charges and fee structure, room rates cannot be merely adjusted to cover the anticipated costs for bricks and mortar. Even without Phase II price guidelines, reimbursement agencies are taking a closer look at rate increases and make it increasingly important to justify price increases in terms of need and operating efficiencies, rather than cost levels only.

At this point, a pro forma income statement has been developed showing revenues less operating expenses (excluding depreciation) and giving income available for debt service. Attention should now be turned to the available methods of financing.

The financing decision must consider three questions:

- (1) How much should be raised?
- (2) What borrowing options are open?
- (3) How are the borrowing options evaluated?

How much?

The amount required to finance the expansion includes the obvious amounts to cover land acquisition, building and equipment costs, offsite improvements, and financing costs. In addition, there are two cash requirements that must be provided for or assumed to be part of the total financial needs. The first is "bridge financing," and the second is "increased working capital." Bridge financing is the amount of dollars required to cover a negative cash flow during the construction pe-

riod when salaries and fixed charges increase in advance of increased revenue levels. Secondly, an increase in working capital may be required to finance the higher inventory and receivables level associated with the increased plant facility.

What are the financing options?

The range of available methods of financing will vary according to a hospital's geographic location, category of ownership, and specific financial needs.

The methods of financing health care facilities are continually changing as the federal government expands its existing programs and introduces new ones.

At present, there are five major financing methods available to hospitals. Although fund drives and philanthropic donations are an important aspect of hospital development, they are not included here in the category of financing options. In any case, the major areas are: Hill-Burton programs, tax-exempt bonds, taxable mortgage/bonds, FHA-insured mortgages, and lease financing.

These basic alternatives, briefly described, are:

(1) Hill-Burton Programs:

- Grants for the construction and modernization of nonprofit hospitals and public health centers, long-term care facilities, and outpatient and rehabilitation facilities;
- Direct loans with interest rate subsidy available to public agencies for the construction or modernization of public health centers and public hospitals, long-term care facilities, and outpatient and rehabilitation facilities;
- Loan guarantees available to nonfederal lenders to secure the payment of principal and interest on loans made to nonprofit private agencies for the construction or modernization of hospitals, long-term care facilities, and outpatient and rehabilitation facilities.

(2) Tax-Exempt Bonds:

- Issued by a state health facilities authority on behalf of a nonprofit hospital,

- Issued by a municipal corporation or hospital district for a public hospital,
 - Issued by a municipal health facilities board on behalf of a nonprofit hospital,
 - Issued by a local industrial development authority on behalf of a nonprofit health facility and, under certain circumstances, on behalf of a profit-making health facility.
- (3) Taxable First Mortgage Bonds:
- Sold publicly or offered privately by nonprofit and for-profit hospitals.
- (4) Mortgage Loans on nonprofit and For-Profit Health Facilities Insured by FHA:
- Placed with a mortgage banker or the Federal National Mortgage Association.
 - Used as collateral for issuing a Government National Mortgage Association "modified pass-through" security.
- (5) Lease Financing:
- Up to 100% financing that is fully reimbursable by third-party payers.

How Are the Alternatives Evaluated?

In evaluating alternative financing methods, particular consideration should be given to analyzing the effective cost of money, the terms of the loan, the covenants or restrictions placed on the hospital's operations, and the timing from the planning stage through the completion of construction.

The lowest interest rate (or coupon) does not necessarily result in the lowest cost of money. For example, under the tax-exempt methods, it is common for a reserve fund to be established that is equal to one year's debt service (principal and interest). The annual debt service on a \$10 million, 6%, twenty-five-year bond having level debt service is \$782,300. Assuming no other expenses (such as underwriting charges), the effective cost of the usable monies would be 6.65%.

In analyzing the terms of the loan, existing reimburse-

ment formulas must be considered. As Medicare regulations currently stand, interest, expense, and depreciation are allowable costs for reimbursement purposes, but payments for amortization of principal are not. Accordingly, if the depreciation allowance is the only source of cash flow available to meet principal payments, then clearly the principal payments must be geared to a project's schedule of depreciation. It would be poor business judgment to lower the amortization schedule to achieve a higher coverage ratio if a provision were not made for the full amortization of principal from allowable reimbursable costs.

The next category to review is restrictions placed on a borrower; e.g., restrictions pertaining to the mortgage lien, the assumption of additional debt, working capital requirements, lease obligations, sinking fund requirements, call provisions, and refunding protection. For example, a hospital planning a \$10 million expansion program that expected a \$400,000 Hill-Burton guaranteed loan should consider seriously the indenture restrictions pertaining to this loan in light of the incremental capital required.

As a final element in considering financing alternatives, the proposed time schedule for each method must be analyzed thoroughly. Construction costs are constantly rising due to inflation, so the administrative requirements and time lag of obtaining an FHA-insured loan might cost more in the end than a private placement of debt securities which could be obtained quickly.

As the demand for expansion funds and the creditworthiness of hospitals has increased, hospitals have come to be analyzed as an industry. Many of the same quantitative standards that are applied to corporate and municipal finance are being adjusted and applied to the hospital industry. As in other areas, the qualitative factors of a business can have an important impact on the interest rate and terms of a loan. Behind the numbers, investors are seriously interested in the quality and depth of the medical staff, the level of community support for an institution, and how well the hospital is managed. ■