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Call for papers

Mission of the *Academy Journal*

As the official journal of the AIA Academy of Architecture for Health (AAH), this publication explores subjects of interest to AAH members and others involved in the fields of healthcare architecture, planning, design, and construction. The goal is to promote awareness, educational exchange, and advancement of the overall project delivery process, building products, and medical progress that affect all involved in those fields.

About AAH

AAH is one of 21 member communities of The American Institute of Architects (AIA). AAH is unique in the depth of its collaboration with professionals from all sectors of the healthcare community including physicians, nurses, hospital administrators, facility planners, engineers, managers, healthcare educators, industry and government representatives, product manufacturers, healthcare contractors, specialty subcontractors, allied design professionals, and healthcare consultants.

AAH currently consists of approximately 7,000 members. Its mission is to improve both the quality of healthcare design and the design of healthy communities by developing, documenting, and disseminating knowledge; educating design practitioners and other related constituencies; advancing the practice of architecture; and affiliating and advocating with others that share these priorities.

Please visit our website at aia.org/aah for more about our activities. Please direct any inquiries to aah@aia.org.

***Academy Journal* editor**

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Design and Construction: A Key Component in Hospitals Credit Ratings

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ABSTRACT

Credit Rating Agencies (CRAs) measure creditworthiness of health systems in various financially driven categories. Common strategies within the design and construction industry can bring value to healthcare organizations by providing vitality in three main categories commonly evaluated by CRA's: market share, quality measures, and capital structure.

Design and construction have responded with creative development models that align with the rise in outpatient services driven by value-based care helping organizations compete as integrated health systems, improve market share, and serve patients across the continuum of care. Likewise, quality measures improved through facilities operating performance can directly influence patient and staff satisfaction as a result of efficient energy performance, technology readiness, and right-sized healthcare environments.

Input on investments affecting capital plans through facilities assessment of existing and/or acquired real estate assets and comprehensive architectural facilities master plans provides key information to CRA's in an effort to evaluate an organization's long-term debt and its ratio of capital spending to depreciation of assets.

Design and construction can effectively provide value to healthcare organizations in achieving successful credit ratings that can positively propel them into a very competitive market.

Introduction

A hospital's credit rating is a very complex subject that depends on various financial factors such as market share, operating performance, balance sheet, capital plan, debt structure, and legal covenants. Understanding the significance credit ratings can have on a healthcare organization's financial success can help architects appreciate the potential influence that they can have on design and construction decisions and, more importantly, how design and construction builds value in the bond rating process.

About hospitals credit ratings

Credit ratings for healthcare organizations are tracked closely by Credit Rating Agencies (CRAs) such as Moody's, Standard & Poor's (S&P), and Fitch. These agencies grade the creditworthiness and financial trust in an organization for investors. These two factors can greatly influence a healthcare organization's success and profitability.

As credit ratings for healthcare organizations are established, the ability to borrow money at a favorable interest rate and secure bond funding is driven by the level of credit rating the organization can achieve. A good credit rating helps healthcare organizations finance projects in order to strengthen their role in the very competitive marketplace. Strengthening initiatives may include large capital improvement projects; implementation of the latest technology; major medical equipment purchases; and

specialty service provisions that can enhance catchment area and market share, and provide the revenue needed to be profitable and pay back debt. Common credit ratings are defined in letters with Triple A rating indicating an organization is well-positioned to pay back debt. Ratings of D and below indicate an organization that would struggle to pay back debt. (Refer to Figure 1 – Example of Rating Marks for Long Term Bonds).

Credit rating agencies metrics

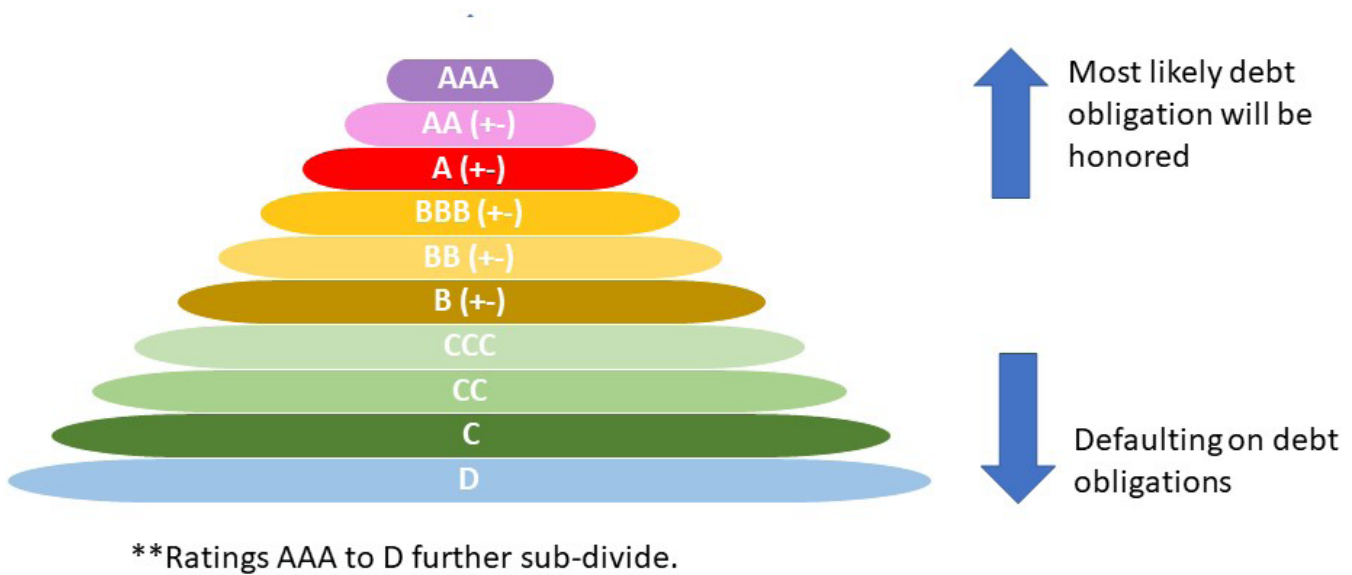
The metrics that inform ratings vary between CRAs and are weighted differently for not-for-profit and for-profit healthcare organizations. Common credit rating metrics among CRAs that apply to both types of organizations include:

- Market share
- Operating performance
- Balance sheet
- Capital plan
- Debt structure
- Legal covenants

The design and construction industry is most instrumental in building value specifically in market share, operating performance, and capital plan. (Refer to Figure 2 – Design and Construction CRA categories of influence.)

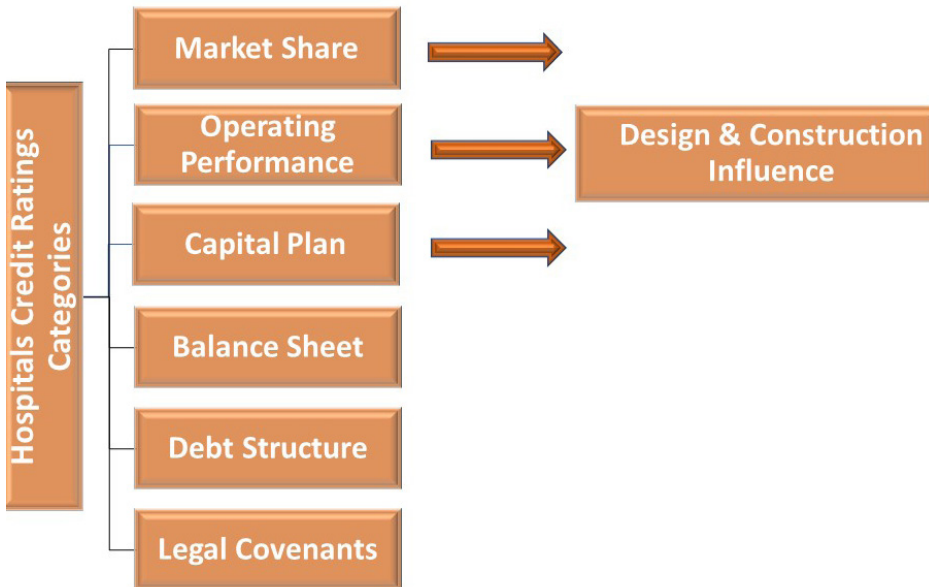
FIGURE 1

Rating Marks for Long Term Bonds



Example of Rating Marks for Long Term Bonds
Image credit: Eileen Trimbach

FIGURE 2



CRA categories influenced by Design and Construction
Image credit: Eileen Trimbach

Not-for-profit and safety net hospitals have a challenging time with the rating experience due to reimbursements and demographic characteristics with a high rate of charity service. Safety net hospitals may opt out of the investor market and instead go through U.S. Department of Housing and Urban Development (HUD), which does not impose a rating. HUD's Office of Hospital Facilities, within the Office of Healthcare Programs, administers the Fair Housing Act's Section 242 Mortgage Insurance for Hospitals. This program provides mortgage insurance for acute care hospital facilities ranging from large teaching institutions to small rural critical access hospitals. The program helps elevate creditworthiness, allowing hospitals to borrow at lower interest rates and obtain higher spending power to fund the projects that serve their communities.

Credit ratings metrics categories influenced by design and construction

1. Market share

Market share relates to the total volume of sales revenue for an entity out of a total market potential. Profitability strategies across the healthcare industry continue to evolve and are no longer defined along the lines of high margins, high volumes, and primarily inpatient care. Driven by value-based care, the new business model for hospitals indicates a decline in inpatient services and an increase in outpatient services. This new order is re-defining how the healthcare industry approaches market share to maintain profitability. This shift has given rise to acquisitions to grow market share and better compete as an integrated health system; collaboration is a key factor to serve patients across the continuum of care.

In view of more integrated health system economics, the Advisory Board, a trusted healthcare industry research platform that brings great value to performance of healthcare organizations, recommends a "Total Share Model" of market share. This model expands the view of market share to include: Service Share, Physician Share, and Patient Share. Service Share is the percentage of services being provided at an organization's facilities. Physician Share is the percentage of physicians practicing at a health system's facility. Patient Share is the percentage of total patient spending on health care services at a health system's facility.

In response to a Total Share Model outlook, the design and construction industries have collaborated with the healthcare industry in the design and development of facilities that respond positively to the new economics of health systems. The goals are optimal outreach and

increased market share. This includes the development of concepts such as medical villages, medical neighborhoods, and micro-hospitals. Placed in strategic locations, these facilities focus on outpatient services to provide easy access for the suburban patient population.

The concept of a Medical Village or Medical Neighborhood is a development that functions similarly to a retail mall where diverse services are provided in one thoughtfully planned campus. Included are collaborative services such as primary care and specialty care in addition to health-related affinity functions such as nutrition and physical health (e.g., grocers, yoga, daycare, and alternative medicine). All are in one easily accessible location serving communities that support a network of care. Likewise, micro-hospitals are designed as ambulatory access points in a strategically underserved region with an emergency/urgent care component. These facilities provide a link between the suburban population and tertiary hospitals when a higher level of care is required, thereby minimizing and/or avoiding in-patient care and yet delivering quality care where it's needed.

Advancements in technology have given rise to medical informatics that include trends such as electronic medical records, tele-health, home based monitoring, and healthcare applications for mobile phones. Data mined from technology informs outreach initiatives and catchment area enhancement strategies. For the construction industry, these technological advances and the move toward a multiple site outpatient model have given rise to the development of brick and mortar health data centers sufficiently sized to support these services. According to *Medical Construction & Design*, 65% of hospital data centers occupy between 3,000 and 5,000 square feet. This figure is estimated to be rapidly growing to support technological advances and give rise to consolidated data centers offsite to better serve healthcare organizations.

2. Operating performance

Operating performance is best defined as the profits and costs that a company earns and spends in carrying out its ordinary activities. In today's age of healthcare reform, we are seeing a myriad of financial situations affecting healthcare organizations' profitability. Reimbursement is now being tied directly to quality metrics. These quality metrics may include Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores—publicly available quality scores that depend on the organization's commitment to safety—information technology investments, and even the World Health Organization's International Classification of Diseases

ICD-10 readiness. CRAs consider quality metrics such as these when evaluating an organization's operational performance, among other financial data, to assess creditworthiness and decide on the investment risk and the ability of an organization to pay back debt.

Healthcare organizations refer to measurements of performance as key performance indicators (KPIs). KPIs are core organizational processes across various categories that are commonly measured. Typical data evaluated include quality of care, resources utilization, cost, efficiency, and patient satisfaction—all which have great influence in financial performance.

Becker's Hospital Review published "The Skinny on Healthcare KPIs," defining KPI's as measures of performance evaluated to meet an established corporate goal as part of a business strategy. For example, some KPI's commonly measured include patient satisfaction, patient throughput, average length of stay, utilization rates, timeliness of bed assignment, rate of medication errors, and other metrics for organizational success. If a KPI does not meet organizational expectations, the measurement and its data are slated for further strategic plan review.

The necessity of meeting KPIs and their underlying organizational goals helps guide design very early in the planning process. KPI data is embedded in the design criteria as organizational process improvement information. This helps right-size and properly distribute space in healthcare environments. Additionally, design and construction play an important role in operating performance through facilities compliance with code, life safety requirements, energy performance, staff utilization, and technology readiness.

3. Capital plan

Capital structure includes long-term debt and equity. As a healthcare organization seeks to maintain or increase its financial profile and credit worthiness, it will focus on what can be controlled to avoid a rating downgrade. Factors associated with credit fluctuation include expanding market share, merging with larger organizations, and leaning operations. All of these require investments affecting capital plans. Design and construction professionals provide input through facility assessments of existing and/or acquired real estate assets or design of a comprehensive facilities master plan.

A facilities assessment and a comprehensive facilities master plan provide key information to a CRA to evaluate an organization's potential long-term debt and ratio of

capital spending to depreciation of assets. The facilities assessment exercise includes making a judgment on the physical condition of existing facilities, providing benchmarks, assessing length of useful life, and providing cost estimates to help the healthcare organization make informed decisions on assets such as deferred maintenance, re-investment, and prioritization.

Facilities master planning activities include evaluation of anticipated patient volumes and trends within industry delivery models. These factors help the architect understand opportunities for decompression, expansion, and alignment of services within existing and acquired facilities based on streamlined operations. The facilities master plan is aligned with an anticipated total project cost and project phasing strategies to be reviewed for viability and risks by the CRA as part of the evaluation of an organization's financial health.

A brief discussion with Robert R. Feldbauer, FACHE, and Vice President for Facilities, Construction and Real Estate at University of Cincinnati Medical Center, a not-for profit organization, emphasized that design and construction affect three critical areas the bond market looks at: age of plant, physical condition of facilities, and capital spending ratio. "The market will also look at the ratio of capital spending to depreciation, data which is provided through anticipated facilities master planning and capital budgeting. Those are all improved through design and construction projects," says Feldbauer.

Conclusion

Design and construction professionals can bring considerable value to a healthcare organization as active partners into achieving the key credit rating agency measurements of market share, operating performance, and capital plan strategy. Each provide opportunities to help a healthcare organization become strategically positioned for improved market catchment and outreach and to position the organization to successfully respond to current and future industry needs.

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