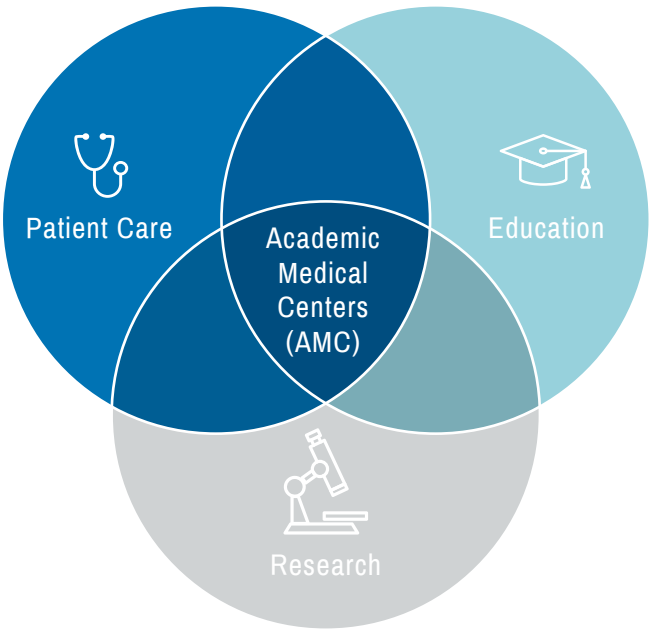
ACADEMIC MEDICAL CENTERS – UNIQUE NEEDS THAT REQUIRE A SPECIALIZED APPROACH

Not-for-profit (NFP) healthcare organizations represent a unique group of mission-based investors. In addition to being charged with providing high-quality care to their communities, they face numerous complex challenges that make it increasingly difficult to meet this mission. Demographics, rising costs, new entrants, and regulatory pressures are just some of the issues facing the NFP healthcare industry.

Academic medical centers (AMCs) represent a more specialized set within NFP healthcare institutions. Collectively, AMCs account for more than $500 billion in healthcare spending, or 3.1% of the U.S. GDP [1] . Unlike traditional NFP healthcare organizations, which have a singular pursuit, AMCs have a tripartite mission:



TRANSFORMING PORTFOLIOS. ADVANCING MISSIONS.

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• Patient Care

Like traditional healthcare systems, AMCs provide traditional clinical services such as inpatient and outpatient care. However, AMCs typically provide higher-end inpatient services when compared to traditional healthcare organizations. Examples include cardiac procedures, neurosurgery, and experimental trials. Clinical services represent the largest source of revenue, accounting for nearly 70% of revenues for AMCs, according to PwC.

• Research

AMCs also perform medical research to support each institution's mission. AMCs receive funding from the National Institutes of Health (NIH), which is central to each organization's ability to conduct groundbreaking research. These amounts can be substantial—the top 10 medical schools averaged $437 million in funding in 2018 [2] . Research is a fundamental strength for AMCs that allows them to offer higher-end services that may only be offered at a handful of institutions. The innovations and discoveries that result from this research can lead to the development of new products and procedures, contributing positively to the income, and helping AMCs fulfill their mission.

• Education

AMCs also focus on educating and training both physicians and nurses. AMCs are typically affiliated with a medical school or university in some form or fashion. Some AMCs may fall under the same ownership structure as the university (and are wholly controlled by those universities). In some cases, an AMC may be separate from the university but have an affiliation agreement with the school, while some have completely separated from the university, in which case they may have an affiliation with a traditional NFP healthcare system. Education represents a significant cost for AMCs (over $16 billion annually [3]), one which they are not always compensated for, as many of those students work at other medical institutions once training is complete. AMCs do receive additional funding from Medicare and Medicaid for teaching services, but these are vulnerable to budget cuts.

AMCs have historically benefited from their medical school affiliation and ability to offer higher-end clinical services, when compared to traditional healthcare organizations. However, as the healthcare industry continues to evolve to one that is increasingly focused on quality and delivery in the lowest cost setting, supporting a tripartite mission is becoming increasingly difficult. Their distinctive strengths also create challenges, and as a result, many AMCs are beginning to evolve their high-cost structures in an effort to remain viable. This means that as a group of institutional investors, AMCs require a specialized approach, when compared to other not-for-profit investors such as higher education/ endowments.

Benefiting Characteristics of AMCs

Relative to traditional NFP healthcare systems, AMCs have held a distinct advantage as leading providers of higher-end services. One of the unique strengths of an academic medical center is its brand affiliation with a renowned medical school or university. Examples include Duke, Vanderbilt, and the University of North Carolina, among others. This creates significant brand equity and gives many AMCs a distinct competitive advantage over traditional providers, particularly for more complicated procedures. AMCs are often able to leverage their brand through affiliations with other providers, increasing market access through their unique or higher-end service offerings. Many consumers see AMCs as "must have" providers, and affiliations or partnerships with medical schools further support this reputation.

Ongoing research and funding also give certain AMCs the ability to offer services that other hospitals may not. For example, physicians and researchers at one AMC may have discovered a breakthrough procedure to treat a certain type of cancer that cannot be performed at a competing facility. Because of this, many AMCs see strong demand from outside their primary market areas. Examples include the Mayo Clinic, Johns Hopkins, and MD Anderson, where patients travel from across the country to receive specialized treatments. This gives those AMCs a much larger revenue base when compared to non-AMCs. Per Moody's their median AMC revenue base is four times larger than that of their non-AMC rated pool. Furthermore, AMCs also derive the majority of their revenues from inpatient care, which is typically more profitable than outpatient procedures due to their higher reimbursement rates.

Challenges Faced by AMCs

While AMCs have typically enjoyed a competitive advantage relative to other NFP hospitals, these unique characteristics are posing a threat to how AMCs operate in an environment that puts a greater emphasis on value and cost effectiveness. Since the passage of the Affordable Care Act in 2010, the healthcare industry has undergone a transformation, requiring hospitals to make fundamental changes

to their role in the delivery system. More specifically, the sector is shifting from volume/fee-based care to a value-based reimbursement structure with a population health approach.

The old AMC structure is not built to address these changing dynamics because AMCs naturally have higher-cost structures than non-AMCs. AMCs' focus on more complex care means that the services they provide are typically much more expensive than procedures performed at traditional hospital settings. As a result, AMCs spend much more on supplies and other expenses than non-AMCs. According to Moody's, AMC supplies as a percentage of revenues were 27% for its rated Academic Medical Centers, versus 19% for non-AMCs. Additionally, AMCs are often where the sickest patients go for care, which presents a burden from a cost perspective. Their share of low-income individuals who qualify for Medicaid or charity care is also substantially higher. According to PwC, AMCs provide 37% of all charity care and 26% of all Medicaid hospitalizations. Because of their specialized nature, AMCs also receive on average 38% of transfers from hospitals that cannot provide the complex care[4] the transferred patients need.

With payors and employers moving toward value-based reimbursements, it will likely become increasingly difficult for AMCs to justify higher-cost procedures. While AMCs have historically benefitted from providing unique procedures that may not be available elsewhere, competition has increased significantly over the last decade, thanks to technological advances as well as industry consolidation. According to a recent study by Chartis Group, approximately 70% of inpatient care performed at an AMC could be performed at a lower-cost traditional hospital setting. When a lower-cost option is available, insurers and employers will likely choose the lower-cost offering over that of an AMC.

While normally a strength for AMCs, university/medical school affiliation could serve to hamper the ability of AMCs to adjust in today's environment. Universities may have a more onerous governance structure than the medical center, with conflicting goals. Within the past five years, the industry has witnessed a trend of universities distancing themselves from medical centers. With tuition growth rates slowing or declining for many universities, those with medical centers have witnessed healthcare services become a much larger piece of overall revenue.

For universities that have struggled with slowing tuition growth and falling state aid, this was seen as a positive initially. However, healthcare organizations and universities have very different payment models, meaning that earnings from medical services can be subject to substantial volatility. This is because while higher education institutions receive revenue for services beforehand, healthcare institutions are typically paid for services after the fact, and usually at a rate below the true cost of services provided. If the patient is subject to government reimbursement (Medicaid and Medicare), reimbursement can be a fraction of the actual cost. More recently, this has created heightened income volatility for many universities concerning third parties such as credit rating agencies. Declining margins and the capital-intensive nature of healthcare have led many institutions to spin out their medical centers. Recent examples include Penn State University, Vanderbilt, and the University of Arizona. After the University of Arizona's medical center was acquired by Banner, a non-AMC, it was upgraded by Moody's. In some cases, the AMC separates from the medical school and becomes its own wholly owned entity but maintains a financial commitment to the university. These commitments can be substantial and put further pressure on an AMC's margins.

How AMCs Are Evolving

In the face of the challenges described above, AMCs are beginning to transition in an effort to retain their competitive advantages. While costly, spin-offs and separations from medical schools can give AMCs more flexibility to make strategic changes in today's evolving healthcare environment. Furthermore, being acquired by or partnering with a traditional NFP healthcare organization can align each organization's similar goals and priorities. However, AMCs must be careful that their other missions – research and education – do not clash with new partners.

The healthcare industry has witnessed significant merger and acquisition (M&A) activity over the past five years, and AMCs have not been immune. Specifically, many AMCs are merging with or acquiring community hospitals in their markets. This is attractive for AMCs because it gives them the ability to perform lower-cost procedures outside of the higher-cost AMC setting. Furthermore, acquiring a community health system can expand reach and increase an AMC's referral base. If a patient is determined to need more specialized care, they can be transferred to the flagship AMC facility, while less invasive procedures can be performed in the lower-cost setting. Recent examples include Northwestern Memorial HealthCare's acquisition of Lake Forest Hospital and Cadence Health Care, in

addition to University of Chicago Medical Center's acquisition of Ingalls Health System.

Academic medical centers are also being acquired by large regional health systems. Most notably, Atrium Health recently announced a merger with Wake Forest Baptist Health, while University of Arizona Health System was acquired by Banner in 2015. With these deals, large regional systems aim to leverage the reputation and brand of a well-known AMC. According to PwC, nearly 60% of consumers surveyed said they are likely to choose a hospital that is affiliated with an academic medical center. It is probable that the industry will continue to see further M&A activity as a way for AMCs to expand reach and compete with lower-cost counterparts.

AMCs will also seek ways to find new revenue streams to offset declining margins. Research and innovation provide many AMCs the opportunity to benefit financially from their findings. For example, nearly 20% of City of Hope's revenues come from the licensing of its patented cancer technologies. AMCs will also seek to grow income from non-acute services such as long-term care. Lastly, many AMCs benefit from 340B drug pricing, which requires pharmaceutical manufacturers to give eligible health systems discounts on certain specialty drugs (which providers can then sell at a profit). This has become a growing source of revenue for many AMCs – nearly 20% of all revenues for some organizations. There is growing regulatory scrutiny over the program. Changes or elimination of the program could prove detrimental for some AMCs and bears watching.

Conclusion

The evolving and challenging nature of healthcare means that each organization has its own unique characteristics. As institutional investors, healthcare requires a specialized approach to asset allocation. Academic medical centers are no different, and likely require an even more individualized approach. Highland Associates has more than 30 years of experience in working with NFP healthcare institutions, including AMCs. Our enterprise approach allows us to account for the needs of the organization first to ensure that our clients are ultimately able to fulfill their missions.

[1] PwC; [2] Becker's Hospital Review; [3] PwC; [4] The New England Journal of Medicine

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