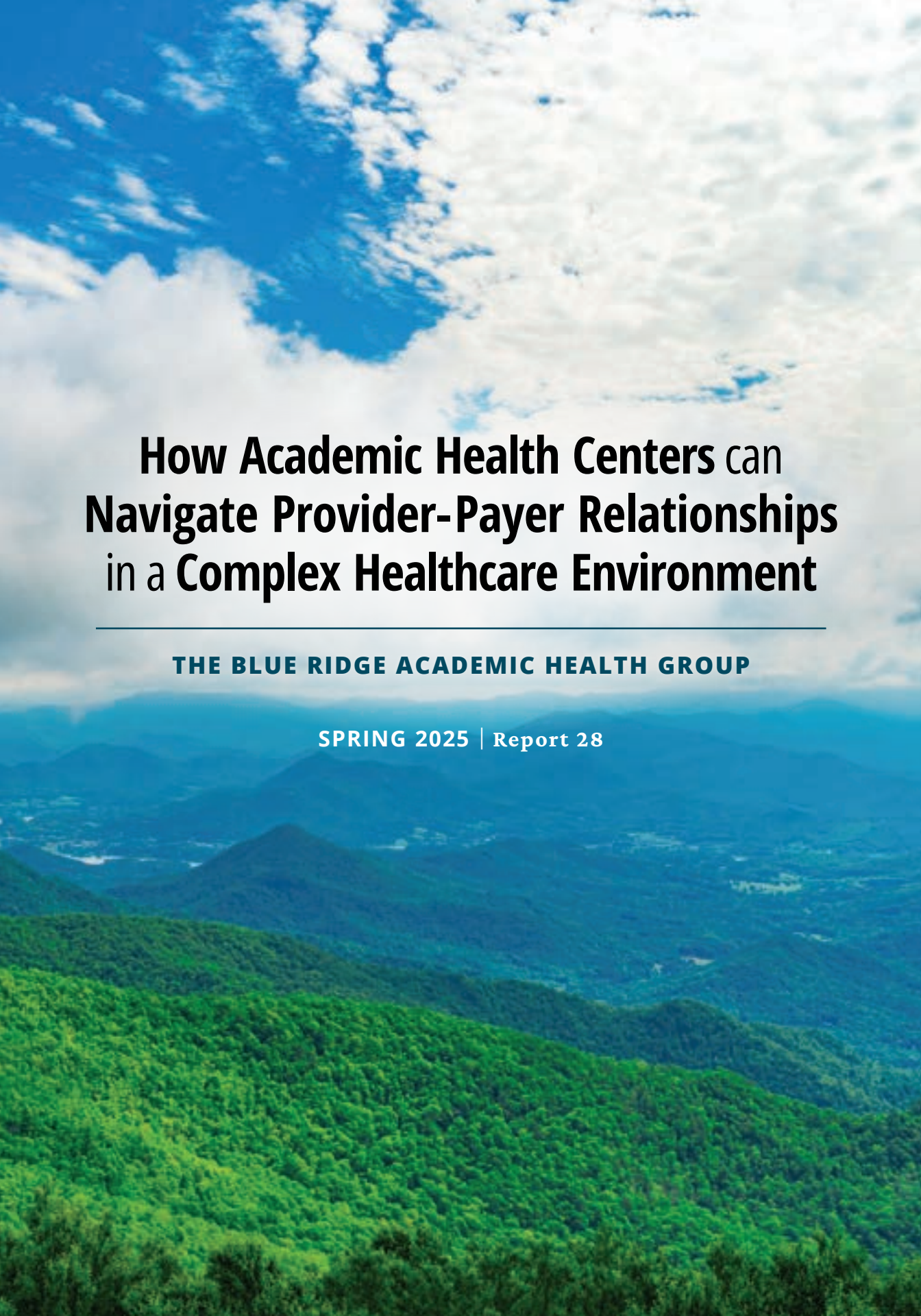

How Academic Health Centers can Navigate Provider-Payer Relationships in a Complex Healthcare Environment

THE BLUE RIDGE ACADEMIC HEALTH GROUP

SPRING 2025 | Report 28

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(August 2024 meeting in La Jolla, CA))

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Mission:

The Blue Ridge Academic Health Group *seeks to take a societal view of health and healthcare needs and to identify recommendations for academic health centers (AHCs) to help create greater value for society. The Blue Ridge Group also recommends public policies to enable AHCs to accomplish these ends.*

Introduction: How Academic Health Centers Can Navigate Provider-Payer Relationships in a Complex Healthcare Environment

Background and Context

Academic health centers (AHCs) play a critical role in the healthcare ecosystem. They provide the highest levels of patient care through their unique programs and services, serve a disproportionate number of governmentally insured and uninsured patients, and train the next generation of healthcare professionals. In addition, their research activities drive advancements in medicine through basic, clinical, and translational research.

AHCs have historically consisted of a medical school (and other health professional schools in some universities), a faculty practice, and a primary university hospital. Over the past several decades, most AHCs have evolved to become regional health systems by adding community hospitals, growing ambulatory networks, and exploring other sites of care in the community to build scale and improve patient access and convenience. Most AHCs continue to collaborate with local and regional healthcare delivery organizations, as well as other community-based entities, to elevate the health of the population, the quality and breadth of services available to all, and to educate physicians and other health professionals.

Despite this essential role, AHCs are facing multiple headwinds that challenge the economics of healthcare delivery and the financial sustainability of the overall academic health ecosystem given its dependence on financial support from the clinical enterprise. The primary challenges explored in this report underscore how the economic model for AHCs, specifically the reliance on clinical margins to fund education and research shortfalls, is not sustainable. Patient care costs have been rising faster than reimbursement for years, placing enormous pressure on margins, which is reducing the funds available to support the academic mission and the ability to continue investing in cutting-edge clinical programs and effective operations.

Collaborating with payers to achieve the most effective outcomes and value as well as designing payment models that share the benefits of superior performance must be key contributors to righting the ship and improving the prospects for ongoing sustainability of the academic enterprise.

An Unsustainable Economic Model for AHCs

Many healthcare delivery organizations have faced substantial operational and financial headwinds over the past several years. However, while the structure of AHCs and their commitment to research and education provides significant benefits and are core to their mission, it has also added to the pressures on an already challenging economic situation. For example, increasing costs and constrained revenue streams contribute to these challenges.

INCREASING COSTS

COVID and its aftermath significantly escalated costs, specifically labor and supply costs.

- **Labor costs** rose 25% between 2019 and 2022, largely due to a nearly 260% increase in contract labor expenses.[1] High labor costs can be exacerbated by collective bargaining and rising malpractice insurance premiums.
- **Supply costs** grew during the pandemic due to supply chain shortages and bottlenecks, and have continued to grow, swelling by 18.5% between 2019 and 2022.[2] Drug shortages and the launch of many new high-cost drugs have driven up the cost of pharmaceuticals, adding 5% to 20% to hospital costs.[3] Changes to the 340B Drug Pricing Program that allow many AHCs to purchase drugs at a discount have been curtailed momentarily, but a change in that program would have massive impacts on AHC costs and financial performance.
- **Capital costs** have also grown due to rapid increases in the cost and amount of construction and the need for AHCs to acquire the latest technologies and equipment, which are necessary if they are to stay at the forefront of clinical care and medical research.[4] In addition, some AHCs historically lagged behind their local market in ambulatory and inpatient network development and now need to invest significant capital to grow their reach across markets to serve more communities and ensure patient access to their services. Finally, routine infrastructure improvements to existing facilities are needed to catch up, particularly as some of these investments were suspended during COVID.
- **Academic costs** have increased as AHCs must cover shortfalls in the cost of educating the next generation of physicians. For example, almost all are subsidizing unfunded residency and fellowship positions, which are often 100-200 positions or more over Medicare's graduate medical education (GME) reimbursement cap. Furthermore, while AHCs receive extramural research funding from the NIH and other sources, these rarely cover the costs. Every dollar of extramural research funding typically requires another 20 to 40 cents of support, most of which comes from clinical operations.

These increasing costs come on top of an already elevated cost base at AHCs compared to most non-academic hospitals. This is due in part to the higher patient acuity level at AHCs, requiring more complex care. Teaching hospitals with level 1 trauma centers (including all AHCs) and larger hospitals, in other words AHCs, have been found to have higher case mix indices (CMIs) on average compared to other hospitals in the US.[5] In addition, the acuity level at AHCs has been rising; one study found that the CMI at AHCs rose 17% between 2011 and 2020.[6]

To add to the impact of higher patient acuity, academic dynamics at AHCs with residents, fellows, and faculty physicians treating patients, can elongate the care and discharge processes, leading to longer average lengths of stay (ALOS) and a higher cost of care.

Finally, readmission rates are typically higher at AHCs, driven by a number of factors including the higher complexity of the patients treated, which elevates costs. However, a 2020 study found that despite a readmission rate 1.63 times higher at teaching hospitals compared to nonteaching hospitals, their average adjusted 30-day post-discharge mortality rates were 11.55 times lower.[7]

CONSTRAINED REVENUE STREAMS

While costs have been rising, revenue constraints have become more pronounced.

- **Medicare and Medicaid** rate increases have lagged cost increases for over a decade, with the gap between payments and costs growing every year. An analysis conducted by the American Hospital Association showed that in 2022 Medi-

care paid 82 cents for every dollar spent on hospital care. Medicaid pays even less, typically covering 60-70% of costs. AHCs are often the safety net provider for their communities and generally serve more governmentally insured patients than other health systems, which results in a substantial financial hit even with supplemental support from disproportionate share (DSH) and 340B programs. A recent analysis found that the total shortfall from Medicare and Medicaid for hospitals across the US was $130 billion in 2022.[8,9] In fact, the total cumulative shortfall for the five years from 2018 through 2022 totaled $522 billion, an increase of 40% for the five preceding years despite adjusting for inflation.[10] Shifting demographics will make this situation worse as increasing numbers of patients switch from private insurance to Medicare, which is expected to grow from 60 million beneficiaries today to 74 million by 2034.[11]

- **Medicare Advantage (MA),** the private alternative to Medicare, continues to be purported by CMS as a mechanism to better manage costs and quality for the growing senior population. The program has grown, with 284 plans offered in 2023, compared to 90 offered a decade prior.[12] As of April 2024, more than half (54%) of Medicare beneficiaries were enrolled in an MA plan. AHCs and other health systems have experienced a host of issues in working with these plans. Automatic claims denials, complex and burdensome prior authorization requirements, and "clinical validation audits," often for medically necessary care, have led to labor-intensive, time-consuming administrative work for health systems. A study by Syntellis found that MA denials increased by a concerning 56% in 2023 compared to the previous year.[13] Another analysis found that hospitals are spending nearly $20 billion in extra administrative costs each year to handle MA pre-authorizations and denials.[14] To make matters worse, MA plans on average only pay hospitals 90% of what Medicare reimburses.[15] Most importantly, these onerous complications from MA plans often delay care to patients and can lead to a condition becoming worse and more expensive to treat.

A few AHCs have decided to stop accepting select MA plans. This is clearly a burden to patients who may no longer be able to see their regular doctors or receive treatment from the highest quality and/or most convenient hospital. However, the negative impact on some health systems' financial performance is too much to bear, leaving them little choice.

Please see Sidebar 1 for additional details.

SIDEBAR 1:

Scripps Health Drops MA Plans

After losing $75 million treating MA patients in 2023, Scripps Health stopped accepting MA plans as of January 1, 2024. This change applies to Scripps Clinic and Scripps Coastal Medical Center, but Scripps hospitals are still in-network with some plans. This impacted approximately 32,000 patients, or about 10% of its patient population, causing them to scramble to obtain coverage. Some patients switched to fee-for-service Medicare plans to stay with their Scripps physicians, while others moved to Scripps locations that still accept MA. About two-fifths of the patients reportedly decided to seek care elsewhere, which could overwhelm nearby health systems.

Scripps Health CEO Chris Van Gorder stated: "we don't want to walk away from taking care of our patients, but I think we're at that point where we have no choice but to do that…if other organizations are experiencing what we are, it's going to be a short period of time before they start floundering or they get out of Medicare Advantage. I think we will see this trend continue and accelerate unless something changes." [16,17]

- Most health system contracts with private health plans were not designed for the cost increases of the past several years, resulting in commercial payer rates lagging cost growth for many AHCs. In addition, some of these insurers are imposing tighter restrictions on reimbursement and pushing patients to lower cost sites of care, particularly for outpatient services, which creates problems for AHCs given the complexity of their organizations and the patients they serve. Furthermore, some states are imposing more oversight on provider-insurer contracting in an attempt to limit premium increases being passed on to employers and consumers.[18]

AHCs have historically mitigated the tension between costs and revenue through volume growth, and some are exploring AI-driven solutions to improve revenue streams. However, there are limits to hospital and physician capacity, and the cost of building additional beds has become prohibitive in some markets. This will likely worsen as the Medicare population increases and limits AHCs' ability to fill beds and obtain appointments with privately insured patients who help offset the shortfalls from government reimbursement. In addition, increased competition in many markets from ever growing regional health systems and new market entrants and disruptors are hampering growth potential.

Discussion and Commentary

The Changing Payer Landscape

Coinciding with the challenges facing AHCs is a changing payer environment, altering market dynamics and creating an imbalance between payers and providers in many parts of the US.

CONSOLIDATED PAYERS

The health insurance sector has seen significant consolidation in recent years. Nationally, the top five commercial insurers – UnitedHealth Group, Elevance Health (formerly Anthem/Anthem Blue Cross Blue Shield), CVS/Aetna, Cigna, and Kaiser Permanente – currently hold 54% market share for enrollees.[19] UnitedHealth Group posted $400 billion in revenue for fiscal year (FY) 2024[20] while Elevance Health claimed $175 billion in revenue for the same fiscal year.[21] No health system in the country comes close to this scale. HCA, the largest health system in the country, sees 6.4% of inpatient discharges nationally and posted $65 billion in revenue for FY2023.[22]

Payer concentration is even more pronounced in some parts of the country. A 2022 study conducted by the American Medical Association (AMA) found that 73% of commercial insurance markets at the metropolitan statistical area (MSA) level were highly concentrated, defined as having a 2,500 or greater score on the Herfindahl-Hirschman Indices (HHI).[23] In 11% of MSAs, a single insurer had 70% or greater commercial market share. This extreme level of payer concentration is especially high in Michigan, Louisiana, Kentucky, Hawaii, South Carolina, Alabama, Alaska, Illinois, Delaware, and Vermont.[24] No AHC or health system holds close to that level of patient market share in any given state, with the exception of MedStar Health in Washington, DC (72%), Intermountain Health in Utah (57%), and ChristianaCare in Delaware (51%).[25]

The Medicare Advantage market is even more consolidated, dominated by UnitedHealth Group and Humana, with 29% and 18% national market share, respectively.

The Medicare Advantage market is even more consolidated, dominated by UnitedHealth Group and Humana, with 29% and 18% national market share, respectively.

The consolidated payer market inhibits development of a balanced relationship between payers and AHCs such that both can focus on optimizing patient outcomes and value. AHCs in markets with a dominant payer almost always receive low reimbursement rates, well below their peers, and/or coverage exclusions for certain services. In markets where narrow networks are being formed, AHCs are usually included to ensure a full spectrum of services are offered across the network, though many patients are directed to

lower-cost ambulatory providers and community hospitals, with AHCs only providing the most complex services. This puts enormous pressure on AHC financial margins, and in some cases, creates untenable economics leading to postponement of capital projects, reduction or elimination of services, and/or site closures.

PAYERS BECOME PROVIDERS

In addition to horizontal consolidation, some payers are also vertically integrating, entering the provider space and establishing their own physician and ambulatory networks. For example, UnitedHealth Group's subsidiary Optum is now the largest employer of physicians in the country, with approximately 90,000 physicians nationwide, and a cadre of surgery centers and urgent care clinics. CVS/Aetna employs approximately 40,000 providers, including physicians, pharmacists, nurses, and nurse practitioners.

Most health insurers entering the provider space are focused on high-margin outpatient services such as ambulatory surgery and related physician referral channels. Through their owned physician networks, payers can better manage and coordinate care, and direct patients to lower cost or preferred providers – largely to their owned or partnered outpatient clinics and surgery centers. Health insurer entry into the primary and secondary care space risks disintermediation of traditional referral channels to AHCs, pulling away patients and revenues for some high-margin services.

In addition to payers, private equity investors have entered the provider space by investing in/acquiring groups such as US Anesthesia Partners (USAP) and Pediatrix. Retailers have also entered the space but with mixed success. Amazon acquired primary care group One Medical in 2023, CVS Health acquired Oak Street Health, also a primary care network, and Walgreens invested $1 billion in VillageMD. These disruptors and new entrants further risk changing long-standing referral channels to AHCs, threatening to reduce patient volume.

PAST AHC STRATEGIES

Historically, AHCs have used a fairly standard set of strategies to strengthen and maintain relationships with health plans and maintain patient volumes to generate the income needed to support their clinical operations, capital needs, and academic programs. The strategies include:

- Offering demonstrably superior expertise and outcomes compared to competitors for disease areas that are important to large numbers of patients, (e.g., cancer care).
- Growing key programs to become clear market leaders to create patient preference for AHC services that make the AHC essential.
- Increasing physician, outpatient, and hospital capacity and throughput to improve access.
- Building a large network of physicians and hospitals to secure patient volumes and essentiality of the overall academic health enterprise.
- Managing the comprehensive health needs of a large population through a distributed physician and ambulatory network, providing patients with superior access and experience. Note that this has been challenging for many AHCs that often have underdeveloped ambulatory networks.
- Decreasing costs for episodes of care. Note that this too has been challenging for AHCs unless it has been with very specific population segments or services.
- Launching a health plan to own more of the healthcare dollar, particularly if an AHC is increasingly being asked to take on more risk by payers. Note that this is no easy task, and despite the fact that there are about 200 provider-sponsored health plans (PSHPs) currently in the US, the number has fluctuated over the past few decades. This is because many health systems fail to reach the scale necessary to achieve the right risk pool and to make the economics of running a plan actually work.[26]

There is growing concern that these strategies are increasingly insufficient and are unsustainable in the long-term.

WHERE DO WE GO FROM HERE?

What should AHCs do beyond the strategies employed in the past given the dire financial situation many are facing or are expected to face soon?

1. Provide Better Outcomes and Value

Specific strategies could include:

- Develop Care Bundles. Bundled care models offer a single, flat fee for all services associated with an episode of care. AHCs can realize a margin by providing optimal patient outcomes and standardizing and streamlining processes to keep average costs below the flat fee for the "bundle" of services.
  - Several considerations should be noted. First, bundles take time to develop. An AHC must determine which procedures and services are most easily bundled and which can be sold to healthcare purchasers. Procedures that have a clearly defined set of associated services, with reasonable ability to control cost variation, are good candidates (e.g., maternity care, joint replacements, early-stage breast cancer, or colon cancer). Defined care pathways must be developed and tested for each bundle of services, which may involve redesigning existing care delivery models and potentially incorporating/leveraging new technologies. To evaluate the best care pathway, quality and cost data must be aggregated and analyzed. Physicians and other healthcare professionals who are part of care teams delivering the bundled services must be on board and thoroughly trained in the determined care pathway for each bundle.
  - Second, the level of effort required to accomplish all of the above should not be underestimated and begs the question of how to scale up bundling efforts. While creating bundled services can produce positive margins, and certainly plays to the shift toward accountable care and capitated payment models, this is a longer-term strategy.
- Explore the Role of Primary Care in an AHC. Directly managing the basic health needs of a large population through a primary care network provides AHCs with some protection against efforts to exclude them from payer networks. In addition, primary care provides referrals for diagnostic and specialty services, which are key contributors to sustaining and growing patient volumes for some AHCs. Specialists at AHCs also need primary care physicians (PCPs) to help manage the care of chronic disease patients, which can otherwise get pushed onto the specialists, reducing their time to treat new patients and deliver more complex care.

AHCs have wrestled with how to approach primary care for decades. Historically, they have had anemic primary care networks compared to large non-academic health systems. However, growing an employed network of PCPs to a scale necessary to adequately support an AHC on its own would be an enormous lift for most academic health systems. First, the economics of primary care practices are poor at best, often pushing down initiatives to grow primary care on the list of strategic priorities. Second, most physicians at AHCs are faculty members. However, faculty appointments are rarely extended to community primary care physicians even when they are employed, which can create an ingroup/outgroup dynamic between them and faculty specialists, creating friction. Third, primary care practices employed by an AHC expect their patients to obtain timely appointments when referred to specialists, but reducing long wait times for specialist appointments has been a perennial challenge for AHCs due in part to the academic commitments that limit faculty physicians' clinical hours.

Please see Sidebar 2 for additional details.

SIDEBAR 2:

The Primary Care Referral Loop Conundrum

Specialists want robust referral pipelines from primary care physicians (PCPs), but it can be frustrating and costly to build relationships with primary care practices only to see high rates of patient leakage to other specialists. However, from a PCP's perspective, referrals into specialist practices often involve long wait times. These wait times have increased in recent years as physician supply shortages grow in some specialties and geographic markets, as the population ages and has more healthcare needs, and as practice models change (e.g., more specialists are choosing to work for a health system as they see on average 12% fewer patients than they would in independent practices).[27] The average overall wait time to get an appointment in a general cardiology practice rose from 21.1 days in 2017 to 26.6 days in 2022. In that same time period, the average dermatology wait time rose from 32.2 days to 34.5 days; obstetrics/gynecology increased from 26.4 days to 31.4 days, and orthopedic surgery went from 11.4 days to 16.9 days.[28]

Wait times for academic specialty practices can be much longer for several reasons. Academic specialists often see more complex cases, requiring longer visits and limiting appointment availability. In Boston, physician supply should not be a problem as it has the highest physician-to-patient ratio in the US. However, because of the high concentration of academic physicians, Boston also has the highest wait time for specialist appointments compared to 14 other large metro areas.[29]

Communication between academic specialty physicians and a patient's PCP ("closing the referral loop") has also been shown to be frustratingly low. A 2018 study of a large academic health system found that only 35% of specialist referrals had a completed, documented appointment summary, likely due in part to outdated "problem lists" that PCPs often see first.

These factors can lead to high referral rates to non-faculty physicians from aligned PCPs or those employed by an AHC. While primary care is essential to communities as well as a crucial part of population health management and successful performance under value-based reimbursement models, the high patient 'leakage' rates and the cost to recruit and support PCPs can muddy the waters in making the case for larger PCP networks at AHC systems.

Fortunately, there are alternatives to employing a large cadre of PCPs. AHCs can advance primary care models to maximize patient panels and practice capacity and throughput by leveraging advanced practice providers (APPs) and new technologies that improve efficiency. (See the Blue Ridge Academic Health Group Report 27: *The Workforce Crisis: Innovative Approaches to Address Current Shortfalls and Prepare for a Sustainable Future*).

AHCs can strengthen alignment with independent community primary care practices in several ways. An AHC can bolster its differentiated value proposition and reeducate referring PCPs (including payer-employed) on why their patients would benefit from care at an AHC. An AHC's electronic health record (EHR) instances can be offered to community primary care practices, ensuring better data sharing, care coordination, patient management, and compliance with government

guardrails regarding how a health system can interact with independent physician practices. UC San Diego Health has a clinically integrated network with ~1,000 physicians. It found that EHR sharing proved to be an effective "sticky" alignment model. Additionally, AHCs can offer product management resources and other practice resources that community PCP practices would not otherwise have.

Another option is for AHCs to pursue partnerships with primary care practices and urgent care clinics in communities. For example, Emory Healthcare formed a partnership with three urgent care companies including CVS's Minute Clinic, linking those sites to Emory's EHR and incorporating the urgent care physicians into their clinically integrated network without employing them. It should be noted that being overly dependent on referrals from outside an organization can be a risky strategy due to the lack of control over patient referrals should channels suddenly shift. The level of risk partly depends on what kind of market an AHC is in and whether patients are mostly local, in which case owning a large portion of local primary care practices would be important as opposed to patients coming from everywhere. In this case, it would matter less and would be complicated to manage across a broad geography.

Please see Sidebar 3 for additional details.

SIDEBAR 3:

Emory Partners with Urgent Care, Primary Care Entities

In 2015, Emory announced new partnerships with Peachtree Immediate Care and SmartCare Urgent Care (a total of 60 sites combined) and is expanding its existing relationships with CVS's Minute Clinic in the greater Atlanta area.

The urgent care providers at these sites are not employed by Emory, but they will become members of the Emory Healthcare Network, a clinically integrated network (CIN) of Emory-employed and independent practice physicians who work together to manage patients more effectively in a coordinated manner across a broad network. The urgent care sites are linked to Emory's EHR so that patient referrals into Emory specialists are more seamless.

Through this partnership, Emory has been able to reach and provide excellent care to more patients in the community. As a result, it has been able to more directly impact population health improvement and strengthen referral channels into its specialist network without increasing its own employed primary care network. Jon Lewin, then President and CEO of Emory Healthcare, commented: "These clinics will allow patients to get Emory-level care in a timely manner. All of the urgent care clinics coming onboard will have the same quality standards we hold to other members of the Emory Healthcare Network."[30]

More recently, Emory has partnered with One Medical, the innovative primary care network acquired by Amazon in 2022.[31]

Any efforts to grow an employed primary care network, or pursue other alignment strategies, will only be successful if access to an AHC's specialty services can be improved and expanded, otherwise PCPs will look elsewhere for their referrals regardless of the level of alignment with an AHC.

Amidst these complex dynamics surrounding primary care, as well as the growing shortage of PCPs, which is estimated to increase from the current 13,000 to 68,000 by 2036,[32] the NIH has launched a $30 million pilot to test the feasibility of a national primary care research network.[33] As innovators and research institutions, AHCs

should find a way to take a leading role in this effort and to contribute to the evolution underway in primary care to improve access for all communities across the US.

- Don't Fight the Tidal Wave Pushing Care to Non-hospital Settings. Care is increasingly being pushed from inpatient to non-hospital outpatient settings. Medical advances have enabled many surgeries that once required multi-day inpatient stays to be performed on an outpatient basis. Non-hospital facilities have lower overhead, and care can be provided at a lower cost. This can prompt insurers, including the government, to increasingly direct patients to those care sites and design plans and networks that favor lower-cost care settings.
  - As previously discussed, AHCs typically have smaller ambulatory networks relative to many non-academic health systems, though many are in the process of growing those networks. It will be essential for AHCs to expand their non-hospital sites of care to accommodate the trend toward outpatient care. This will require capital, real estate, physicians, other health professionals, and administrators to staff these sites. Additionally, IT infrastructure, clear care pathways, and protocols will be needed to ensure seamless care across all sites within the academic health system.
  - In addition to offering care at ambulatory sites, AHCs will need to develop the capabilities to provide a spectrum of services, including acute care, in a home setting. Patients increasingly prefer receiving care at home as opposed to the hospital, and home care can result in fewer infections, better outcomes, and can often be delivered at a lower cost, making it an attractive option to payers.[34,35] Care at home, particularly acute care, requires a complex collection of technologies, including advanced equipment that can operate in a home, telemonitoring systems, and virtual care platforms, among others. Establishing a hospital-at-home program requires extensive training for physicians and caregivers who will be involved, as well as a well-structured educational program for patients and family members who will be receiving the services.
- Reiterate, Educate, and Demonstrate that the Total Cost of Care for an Episode or Per Capita is often Lower at AHCs (even though Unit Costs may be Higher). This is relevant for bundles and other risk-based reimbursement models, and it is important for payers to understand not only theoretically but also in practice with real data. AHCs often purport this notion, but few have found a way to thoroughly demonstrate the cost/outcomes claims through analysis.

2. Explore Preferred Provider Models

Beyond the typical value-based care models such as shared-savings, partial, and full-capitation models, there are other reimbursement models that can be explored. AHCs can work with payers to become the specialty provider of choice for a set of services, which could involve bundled payments (see page 8) or a variety of other payment arrangements. Going directly to employers to circumvent the middle-man payer is another option, which can be done on a broad level or by becoming a "center of excellence" for a particular clinical program, applicable to all employees. An example of this would be Boeing's arrangement with Cleveland Clinic, whereby all Boeing employees and families have access to Cleveland Clinic's Cardiac Centers of Excellence. Boeing pays eligible travel costs, procedures are paid at 100%, subject to some applicable deductibles, and patients can access concierge services to organize preparations, travel, lodging, and the recovery process.

For any preferred provider option, AHCs must be able to demonstrate high value, consistency in care and patient management, and the ability to offer preferred access to clinical services.[36]

3. Harness the Potential Value of AHCs' Collective Expertise

Over the past decade there have been several cross-market mergers to gain scale, particularly given regulatory and other constraints on further consolidation in their core markets. These types

of cross-market mergers can be challenging for most AHCs, particularly if they involve alignment with an AHC in a different market. An alternative approach is for AHCs in different geographic markets to collaborate on targeted initiatives, which provides some of the benefits of scale without merging. There is a growing number of examples of this type of collaboration, primarily among health systems, whose roots are mainly non-academic, though some of the participants have meaningful education and research programs. Some also include payers and life science companies in their ownership. These collaborative ventures are relatively new, and their long-term success and/or durability have yet to be demonstrated.

Examples include:

- **Civica, Inc.** – Launched in 2018, Civica is a generic pharmaceuticals company that produces generic versions of highly used drugs with the goal of avoiding the disruptive impact of drug shortages on patients and reducing costs for healthcare providers. Civica is governed by CommonSpirit Health, HCA Healthcare, Intermountain Healthcare, Kaiser Permanente, Mayo Clinic, Memorial Hermann, Providence, SSM Health, Trinity Health, and other payers and philanthropic organizations.[37] Civica currently provides nearly 80 medications to more than 1,500 US hospitals. In addition, it is constructing a 'state of the art' manufacturing facility in Virginia to produce generic sterile injectable medications for hospitals and affordable biosimilar insulins for consumers.

- **Longitude Health** – Launched in late 2024, Longitude Health is a for-profit holding company equally owned by Providence, Novant, Memorial Hermann, and Baylor Scott & White Health. Its focus will be on developing and deploying impactful new capabilities such as AI to value-based care models and tools. Longitude Health plans to establish three operating companies that will act as startups on pharmaceutical development, care coordination, and billing. The pharma-related startup will concentrate its efforts on developing complex drugs such as monoclonal antibodies. According to a *Modern Healthcare* article, the care coordination startup will work on addressing issues such as limiting readmissions and improving care transitions, while the billing startup will focus on providing a better patient experience by consolidating medical bills into a single invoice.

  Longitude Health's CEO stated that the four systems have committed to investing tens of millions of dollars a year. "If it's four [health] systems and each one of them did it by themselves and spent $40 million, when they do it collectively each one is only spending $10 million but they get the same output." This arrangement will enable meaningful impact in a way that will allow members to preserve capital.[38,39]

- **Truveta** – Launched in 2021, Truveta pools and analyzes patient data from a large consortium of health systems to support and advance research and drug development and improve access, quality, and public health outcomes. Truveta has 30 health system members, including Providence, Northwell, Tenet, and Trinity Health.[40] The company offers external parties the opportunity to "leverage real-world data, powerful analytics, and the Truveta Language Model [AI] to support therapy development and access, care quality improvement, and public health." Use case examples include safety assessment for novel interventions (to expedite meeting regulatory safety standards), support for Health Economics and Outcomes Research (HEOR) to determine the cost-effectiveness of therapies, clinical trial enhancement using data from over 100 million+ patients, and real-time analytics, among others.

AHCs can emulate this collaborative model by coming together in a variety of ways, without having to merge or become clinically integrated. These include:

Procurement and Purchasing

This would be analogous to a group purchasing organization (GPO) but with a more concentrated, academic focus. It also would not necessarily replace participation in existing GPOs, depending

on the specific circumstances of the individual AHC. Areas of focus could include commodity items, clinical supplies, research supplies, capital purchases (e.g., clinical and research equipment), and pharmaceuticals.

IT and Digital Solutions
Many AHCs have remote centers that monitor patients at home or in an inpatient setting including an intensive care unit (ICU). For example, Emory has a center in Australia that monitors Emory's ICU patients in Georgia during US East Coast nighttime hours, and Mercy Health (St. Louis, MO) operates a 125,000 square foot remote facility that monitors ICU and stroke patients and offers e-consults. (See the Blue Ridge Academic Health Group Report 26: *Harnessing Emerging Virtual and Digital Health Technologies to Transform Health Care*).

A group of AHCs could create a collective virtual hub(s) to monitor patients at multiple AHCs, thereby improving efficiency, reducing physician burnout at off hours within hospitals, and potentially improving outcomes.

Pooling Data
Similar to the Truveta example on page 12, AHCs could pool blinded patient data from their EHRs for a variety of applications to improve healthcare delivery, including the development of new AI-based tools that initially could be trained on the pooled data.

Research and Clinical Trials
Pooled data can also support clinical trials, offering a large patient cohort to help shorten the patient recruitment process and diversify study cohorts. This would be attractive to pharmaceutical companies and other innovative commercial entities. It could also support research at member AHCs, reducing infrastructure costs.

Bundles
Multi-institutional teams could potentially come together to develop care bundles, which could then be disseminated across the larger group of consortium AHCs, speeding the time to bundle development.

Core Educational Curricula
AHC faculty spends a substantial amount of time developing course material and delivering lectures on foundational topics for medical students and are compensated for those efforts. Consortium members could select a small sample of these core lectures from their members and compile a short list as a resource for all AHC members. Pre-recorded, virtual versions could be offered to students, giving them more flexibility and reducing travel time to lecture halls. Without the burden of covering the basic courses, faculty could dedicate more time to developing curricula on specialized topics, or they could expand their capacity of research or clinical care. In addition, this model could provide more consistency in introductory and foundational medical education across multiple academic institutions.

It is important to note that arrangements involving AHCs, including the ones discussed above, are often subject to various legal considerations. Depending on the specific circumstances, efforts to collaborate with or among AHCs may implicate antitrust or anti-competitive behavior concerns, fraud and abuse laws, including, but not limited to, anti-kickback prohibitions, data privacy laws as well as other federal and state laws. Given this closely regulated environment, AHC leadership and administrators should develop and maintain close partnerships with their legal teams for the purpose of reviewing proposed collaborations and ensuring compliance with all applicable legal requirements.

4. Pursue Alternative Revenue/Funding Sources

Diversifying revenue sources can hedge against the impact of volatile market trends, reimbursement shortfalls, policy changes, and catastrophic scenarios like COVID-19 or extreme hurricanes that disrupt and stress care delivery operations. This can mitigate the financial fallout from those negative scenarios, and if done well, can become a new source of real revenue for a health system.

One approach to revenue diversification is launching a new business from within an organization. While this can provide substantial returns, these endeavors require a thorough

planning process, a robust business plan and operating budget, expertise in an area that may be unfamiliar to an organization, time from overextended executives and other team members, and initial capital. With the many demands and challenges facing AHCs, this is a difficult undertaking.

An alternative is to partner with venture funds, unlocking access to larger capital reserves that can be invested in innovations and new businesses.

An AHC can also form its own venture/investment fund, typically structured as a subsidiary of an AHC or health system. This approach allows an organization to support and accelerate innovation while mitigating the level of risk and commitment. It avoids overtaxing internal executives and staff, and/or launching a business about which the organization has limited knowledge or expertise. AHCs can serve as a clinical proving ground to test innovations and can benefit not only from straight financial returns but also from first-in-line access to cutting edge discoveries. Summarized comments from the Chair of Mayo Clinic Ventures support this intent: "The goal of the system's VC arm is not just to make money but also to advance the future of healthcare through discovering new products and therapeutics."[41]

More than 20 AHCs/large health systems have established sizeable venture funds.[42]

Please see Sidebar 4 for additional details.

SIDEBAR 4:

The Proliferation of Venture/Investment Funds at AHCs and Other Large Health Systems

A growing number of AHCs and health systems have launched investment funds. Those leading the way include:

- **Mass General Brigham Ventures:** Established in 2008, the fund currently has a $2.4 billion non-dilutive capital budget. The fund focuses primarily on new life science technologies emerging from MGB. Start-ups that have been particularly successful include Editas Medicine (focused on CRISPR and went through an initial public offering (IPO) in 2016), CoStim Pharmaceuticals (immuno-oncology drugs, acquired by Novartis in 2014), and Keros Therapeutics (treatments for hematologic and musculoskeletal disorders, went through an IPO in 2020).
- **Northwell Holdings:** Established in 2013, the fund has been centered around the goal of "identifying and fostering innovative ideas that enhance the growth of Northwell Health enterprises," implying an intent to prioritize opportunities that have promising market value and that will directly augment the services and operations of Northwell Health. The fund invests in ventures both inside and outside of Northwell.[43]
- **UPMC Enterprises:** Established in 2014, the fund invested more than $800 million by 2020 and committed to investing a total of $1 billion by the end of 2024. Areas of focus include digital solutions and translational science innovations.[44]
- **Vanderbilt (Jumpstart Nova):** In a blend of a venture fund strategy and unique collaborations relevant to the previous section, Vanderbilt was one of the founding partners of Jumpstart Nova, founded in 2022. The $55 million fund invests exclusively in Black founder-led digital health and IT start-ups.[45] The 90+ Limited Partners include Atrium Health, HCA Healthcare, Henry Ford Health System, the American Hospital Association, and Eli Lilly.[46]

Finally, non-traditional partnerships can be explored to bring in new funding to support the academic enterprise, reducing the pressure on clinical subsidization. There are rare cases of partnerships between payers and AHCs in this regard. For example, the BCBS Foundation of Michigan funds clinical research for investigators that conduct trials that reduce costs and improve safety.[47] Governmental agencies outside of the NIH offer many grants. The obvious departments include the Agency for Healthcare Research and Quality (AHRQ) and the National Science Foundation (NSF), among others. Less obvious departments include the Department of Defense through its Congressionally Directed Medical Research Programs,[48] and the Environmental Protection Agency (EPA).[49] Finally, venture-backed healthcare start-ups, of which there are many, need to test their innovations and/or run actual clinical trials once various approvals are met. Those collaborations, should an innovation move forward, can lead to exclusivity agreements, preferred pricing, or co-branding arrangements for AHC partners.

Conclusion

As AHCs continue to navigate through challenging headwinds, exacerbated by their unique economic model to support academic activities, the feeling of "unsustainability" is becoming more palpable.

In a (hopefully) fictitious doomsday thought experiment, what if an AHC had to close or significantly draw down its clinical services? First and foremost, it would severely disrupt access to care. Patients who normally sought treatment at the AHC would need to go elsewhere. Other physician practices and hospitals in the area would have to absorb the volume, which depending on their capacity, would either lead to long wait times for appointments or strong efforts to "expedite care" to increase throughput, which could lead to safety risks and poor outcomes. Furthermore, as mentioned, AHCs often serve as safety net hospitals. A closure or restriction of services would likely disproportionately impact lower-income people and families, which could exacerbate health disparities. Research and innovation would be limited, compromising the ability to stay on the forefront of medical advances that improve patients' lives. In addition, because AHCs are fundamental to the education and training of the next generation of health professionals, a closure would disrupt their experience and limit their exposure to cutting edge medicine, dedicated mentorship, and hands-on learning.

To avoid this theoretical disaster, AHCs, payers, and policymakers will each need to play a part.

AHCS

While not abandoning historically common strategies, AHCs should move beyond standard growth and cost containment efforts. For the former, new strategies will need to be developed to compete in markets that are being permeated by ever growing non-academic health systems and crowded with new entrants. For the latter, routinely examining costs and pushing forward efficiency initiatives is always good practice, but a common refrain regarding these activities is "we've turned over most of the stones – there isn't much juice left that's worth the squeeze." More transformative approaches to care models, pathways, and sites of care should be explored and tested. For example, leveraging APPs in certain services to increase patient access that would allow all clinicians to operate at the top of their license. New care models can be leveraged to develop care bundles that appeal to payers, and, if done well, are profitable for providers and beneficial to patients. Demonstrating high value care can also be translated into preferred provider models, either with payers or with employers, as described above.

AHCs should also explore ways to work together across a variety of initiatives, harnessing the value of scale and leveraging collective expertise and experience.

Finally, AHCs should look to new businesses and ventures to diversify revenue streams as a hedging strategy and a potential new profit generator.

PAYERS

Commercial health insurance companies should find ways to better align with providers in the

interest of a collective goal to improve the health of the population and shift reimbursements to value-based models. Oftentimes, health systems cannot design better care pathways and patient management systems without detailed claims data, which the payer holds, and which isn't always easily accessible for a provider.

Government insurance programs should provide fair reimbursement, which reflects higher unit costs at AHCs, takes into account better outcomes, and in some cases, results in a lower total cost of care. Government program administration, benefits, and approaches to patient management should be retooled to better meet the healthcare demands of Medicare and Medicaid enrollees. It should do this while also attempting to promote health and wellness efforts to avoid costly future healthcare needs to ultimately lower total expenditures. The viability of the Medicare trust fund is right to be of great concern, but maintaining an adequate fund in the future cannot come at the expense of clinicians and healthcare entities through reimbursement that doesn't cover costs.

POLICYMAKERS

Just as health system monopolies in a given market are not acceptable, and mergers increasingly have been blocked in recent years, so too should payer monopolies and oligopolies in states and regions be prevented. Free market economics and fair bargaining cannot exist in highly imbalanced markets, with a dominant insurer and a fragmented set of healthcare delivery organizations.

As the healthcare landscape and ecosystem rapidly evolves, past strategies, payment models, and policies will not suffice. To advance medicine, improve healthcare delivery, improve population health, and create a sustainable environment in which AHCs can operate and flourish, significant changes must be made by all key stakeholders.

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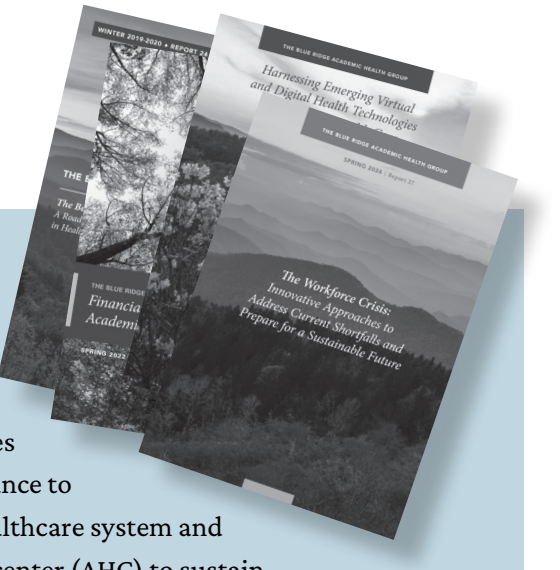

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The Blue Ridge Academic Health Group studies and reports on issues of fundamental importance to improving the health of the nation and its healthcare system and enhancing the ability of the academic health center (AHC) to sustain progress in health and health care through research—both basic and applied—and health professional education. In 27 previous reports, the Blue Ridge Group has sought to provide guidance to AHCs on a range of critical issues (See titles on next page).

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