



THE TIME IS RIGHT FOR HIGHER EDUCATION TO EMBRACE PEER BENCHMARKING

LESSONS FROM THE HEALTHCARE INDUSTRY TRANSFORMATION

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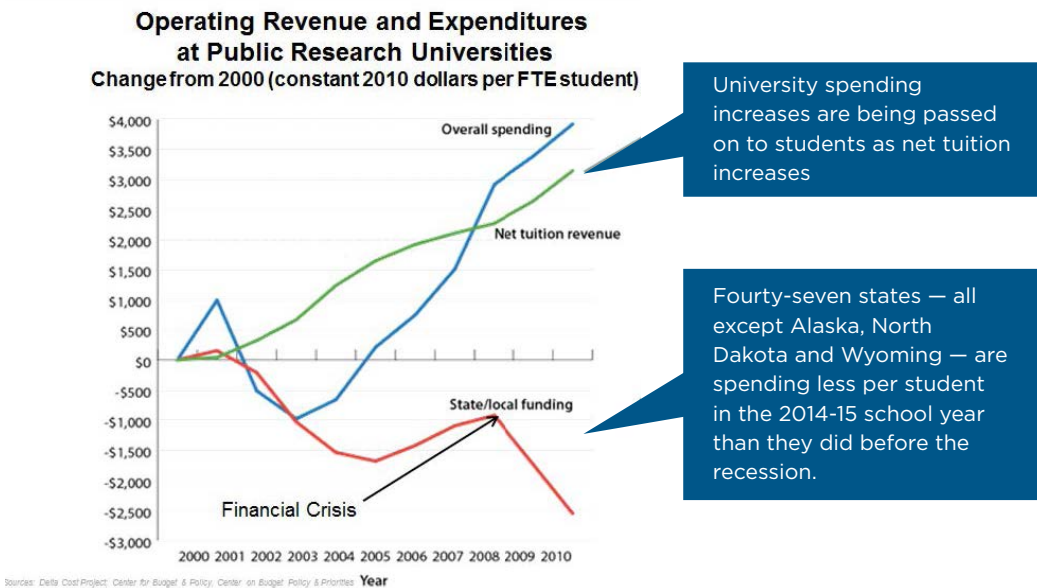
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Time for a Change

Higher education is in crisis and its leaders are handicapped by a lack of reliable data. Other industries, healthcare in particular, have leveraged industry standard data to support management decisions. Each year approximately \$500 billion¹ is spent by institutions of higher education in the U.S. alone. For decades, these institutions have focused on growth and quality improvements and have passed on incremental costs via government subsidies and tuition increases. Today, macro forces such as revenue pressure, cost pressure and new technologies are at an all-time high. We believe these factors are the impetus for disruption in the industry. We are entering an era that will require more informed decision making in higher education and unfortunately the underlying data, especially benchmarking performance information, do not exist to support such strategic thinking and change.

Figure 1. Revenue and Cost Trends in Higher Education

UNIVERSITIES ARE INCREASING TUITION TO OFFSET GOVERNMENT FUNDING DECREASES



The revenue and cost models in higher education are under siege. Universities struggle to offset continued cuts in state appropriations with higher tuition rates. At the same time, the fundamental cost structure associated with educating students and supporting research continues to rise. These issues are further compounded by demand-side market pressures that insist universities continue to invest in the infrastructure to remain competitive for attracting top faculty and students. This trifecta — decreased revenues, higher cost structures and market-dictated investment — necessitates not only introspective questions about institutional priorities, but also a foundational rethinking of how universities evaluate their operations.

Modern university leaders must recognize these change factors and develop appropriate strategies for successful adaptation. Key strategic decisions concerning university offerings, tuition levels, infrastructure investment and operational improvements will benefit from a deep understanding of cost drivers and reliable comparisons to peers, which in many cases are unavailable today.

OUR APPROACH

A review of the healthcare industry over the past 30 years reveals a similar story. Both higher education and healthcare serve the public need, are subject to significant government involvement, possess geographic dispersion, reflect pricing ambiguity and rely on unique mission differentiation. The healthcare industry’s pricing model has necessarily evolved from one in which third-party payers paid whatever amount a hospital billed for patient care to payments based on government and third party imposed rates. Treatments for select conditions and the cost of treatment correlate to fixed payments based on Diagnosis Related Groups (DRGs). Essentially, DRGs are a standard set of codes related to treatment classifications and repayment. Competitive benchmarking consequently evolved as a critical tool in healthcare to assess and target-set operational efficiency and effectiveness. We predict a similar maturation of performance benchmarking practices in higher education as universities are forced to critically evaluate business and administrative cost structures in the face of outside pressures as described above. In summary, we noted the following analogous market pressures in both healthcare and higher education — demand-side pressure, revenue pressure and cost management (see Figure 2).

Figure 2. Summary of Analogous Market Pressures

	HEALTHCARE	HIGHER EDUCATION
Demand-Side Pressures	Required investment in leading physicians, facilities and capabilities to further attract patients and leading clinical practitioners	Required investment in facilities to attract top students and research infrastructure to support top faculty
Revenue Pressure	Capped reimbursement rates for conditions and procedures	Cuts in-state appropriations; nascent limitations on increasing tuition

Cost Management

Revenue pressures create impetus for cost management in both healthcare (1980s: operating and clinical costs) and higher education (2000s: operating and instructional costs)

This article serves to review the healthcare industry’s altered landscape and predict how such a transformation could play out in higher education. Our focus is on the underlying catalysts for change, phases of transformation and thoughts on how to proactively prepare for a fundamental shift in benchmarking and data-based decision making in the modern world.



I. Healthcare

We looked back at the healthcare industry to learn lessons related to the role of data and benchmarking in decision making.

THE DRIVERS FOR CHANGE

More than five decades ago, the U.S. healthcare industry began a transformation in the way it captured data and used such data in decision making. The U.S. healthcare system has always generated vast amounts of data, but over the past 50 years, it has standardized the capturing and reporting of both the inputs (financial costs) and the outputs (clinical outcomes). The chief driver of this standardization has been the federal government. In 1965, Congress passed legislation that established the Medicare and Medicaid programs.² Congress set minimum requirements for healthcare providers to meet to participate and receive payments from these plans, sparking the need for providers to standardize their data and to measure and improve their performance.³ Additionally, in the 1980s, the federal government implemented a new payment system that dramatically shifted the political and economic power away from the providers to the payers.⁴

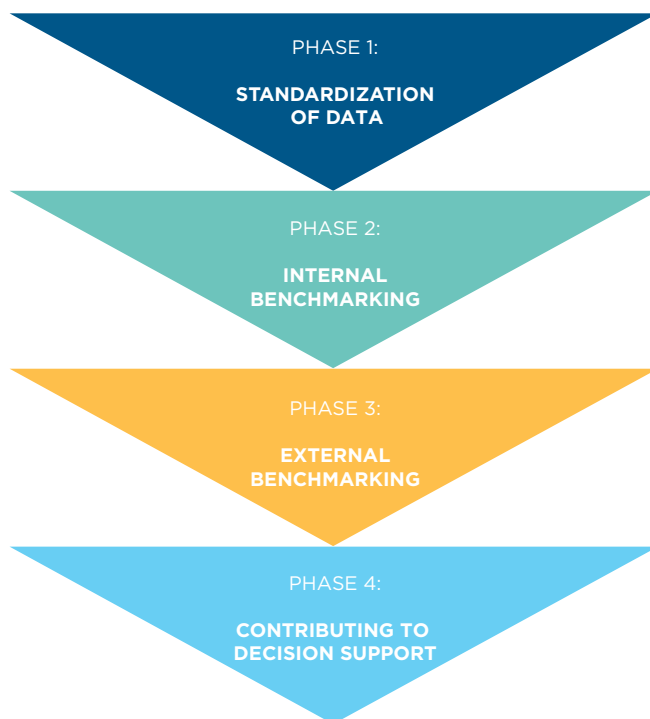
This shift increased pressure on providers to become more cost efficient. Hospitals and healthcare systems began the creation of purchasing consortiums and investment in improved costing models. First looking internally, hospitals sought to understand the variation and discrepancy in the cost of providing clinical care at the DRG level. This led to using comparative data across regional hospitals and healthcare systems.

The need for providers to compare their operational costs to the operational costs of peer hospitals prompted the formation of the University Healthsystem Consortium (UHC) in 1984. The consortium has developed numerous benchmarking databases that measure both the costs and outcomes of their respective

patient populations. Other organizations such as McKesson, Premier and Truven Health Analytics have developed additional benchmarking platforms to serve the growing needs of the healthcare industry. More recently, the federal government has linked quality of care to economic rewards and penalties.⁵

Benchmarking has now become common practice for hospitals for setting budgets, reviewing performance and even factoring into senior administrators' compensation plans. Essentially, the industry underwent an era of transformation that included four phases (see Figure 3):

Figure 3. Phases of Healthcare Transformation



The standardization of data and peer benchmarking was initially used by third-party payers to set reimbursement rates. Later these same data formed the basis for industry standard ratios used to measure both efficacy of care and operational effectiveness.

II. Higher Education

We see similar drivers for change based upon data analysis and benchmarking in higher education. Three key drivers support this conclusion.

DEMAND-SIDE PRESSURES

Much has been written during the past two years about the contribution of the growing university administrative structure. The number of administrative positions in a university and the administrative expense at universities has increased, especially when considered as a ratio to students. But these investments are in direct response to competitive market pressures and a fundamental shift in university DNA.

First, the complexities of both the student experience and compliance regarding federally-funded research have grown immensely. From an educational perspective, some universities have been criticized for their slow evolution and for maintaining the notion of students listening to a professor reading notes in a digital age. The student experience continues to involve and incorporate more elements of co-curricular and experiential educational elements, each of which requires the support of new elements of university infrastructure. Similarly, more focus is being placed on the educational experience and universities are being used to provide more support to students in terms of health services, campus safety and career preparedness. From the research perspective, both grant proposals and award administration require more time and expertise than ever before, with greater consequences to the university for failed compliance.

Perhaps more significantly, the market commands that universities — and research universities in particular — continue to make substantial investments in every aspect of their activities and infrastructure. The lifeblood of an aspiring university is its prestige, which is not only correlated with the caliber of its students and its faculty but also its ranking including research output, employment results and general

reputation. To support the recruitment of high caliber students, a report by New America found that nearly half of universities studied provided merit aid to at least 10 percent of incoming freshmen without financial need.⁶

The merits of student preferences for modern residence halls and campus amenities are a debate for a separate forum, but there is a clear pattern that students assess the caliber of university facilities (both academic and residential) in their choices.⁷ Similarly, faculty are recruited to universities with the ability to provide them the greatest support in terms of financing, lab space, equipment and personnel, including graduate assistants. Accordingly, demand-side pressures dictate that universities invest to maintain competitiveness.

REVENUE PRESSURES

The single largest contributor to the transformed fiscal structure of the public university is reduced state funding. States cut appropriations to the median research university by 26 percent from 2008-13.⁸ Nineteen states cut inflation-adjusted spending per FTE student by more than 30 percent.⁹

To date, the primary tool universities have leveraged to offset cuts in state appropriations has been tuition, but this well is running dry. Tuition accounted for approximately 47 percent of all revenues for public higher education institutions from 2012-14.¹⁰ Published in-state tuition prices at four-year universities have increased at an average of 3.4 percent beyond inflation per year since 2005-06 totaling a 40 percent increase in the last decade.¹¹ Yet, a precipitous rise in discounting practices — and increasingly price sensitive consumers — mitigates the effects of increased state tuition and fees. Moody's Investors Service notes "Public universities project a median 2.2 percent increase in net tuition revenue for FY 2016, a significant departure from FY 2005-12 when most grew net tuition by more than 5 percent annually."¹² So, without the tuition "lever" at their disposal, how are universities generating additional revenue?



Universities have adjusted their mix of applicants to include a greater proportion of out-of-state students who pay higher tuition rates and international students who tend to pay “full freight.” Out-of-state tuition and fees price are as much as \$20,000 higher than in-state tuition and fees for the University of Michigan and the University of Vermont.¹³ Out-of-state enrollment at the University of South Carolina has increased 45 percent the past 15 years and more than doubled at the University of California System since 2009.¹⁴ Similarly, the number of international students in U.S. college-degree programs increased 50 percent from 2010–15, the most significant increase coming from China.¹⁵ While international students account for less than 7 percent of total enrollment,¹⁶ these international students tend to pay a tuition premium greater than out-of-state students international students contributed \$30.5 billion to the U.S. economy from tuition, fees and living expenses.¹⁷

State governments have begun to intercede with policies limiting the ability of universities to continue these market responses. Several states have frozen tuition increases (e.g. Wisconsin, Maine, California), attempted to cap annual increases (e.g. Kentucky, New Jersey) or connected tuition increases to inflation indexes such as the consumer price index (e.g. Missouri). Iowa and Virginia have limited the impact of attracting out-of-state students by tying funding to the number of in-state matriculants, and states like North Carolina penalize schools exceeding out-of-state caps.¹⁸ Thirty additional states have some version of performance funding tied to the support of low-income students and tuition rates, among other metrics.¹⁹

COST MANAGEMENT

At the same time, the cost of educating students continues to rise. Data from the U.S. Department of Education suggests universities increased the number of administrative positions by 60 percent from 1993–2009²⁰ while simultaneously extending generous benefit packages to new and existing employees with healthcare costs increasing 40

percent between 2001–2011.²¹ This is in addition to growing costs associated with a shift towards increased STEM research and education. The cost of offering STEM curricula is greater than other curricula in part due to the need for laboratory space and specialized equipment beyond a traditional classroom.²²

While university and state leaders are beginning to have difficult conversations about limiting their fields of endeavor and reviewing their portfolios of academic programs, the conversations about costs still primarily focus on the administrative structure of the university — specifically labor costs. Labor expenditures account for 60–80 percent of university expenditures. Hence, universities are faced with increasing pressure to consolidate administrative and business support roles in spite of mounting pressure for a growing administrative and student support infrastructure.

OUR PREDICTION FOR HIGHER EDUCATION

While the federal government is not implementing the same cost ceilings healthcare experienced, there is significant momentum behind a series of “nudging policies” contributing to market demand pressures in higher education. In 2013, the federal government implemented a scorecard to help prospective students make more well-informed decisions regarding their investment in their college selection based on outcomes and loan repayment timelines. This action further cultivated a more price-sensitive buyer. Data from the U.S. Department of Education web titled the College Affordability and Transparency Center allows prospective students and parents to research net tuition prices and the rate of tuition change at institutions. Similarly, the democratic presidential primaries placed increased focus on college affordability, indicating that additional interventions are potentially looming. The sustained and increasing pressure for universities to control costs has given rise to concerns regarding organizational efficiency.

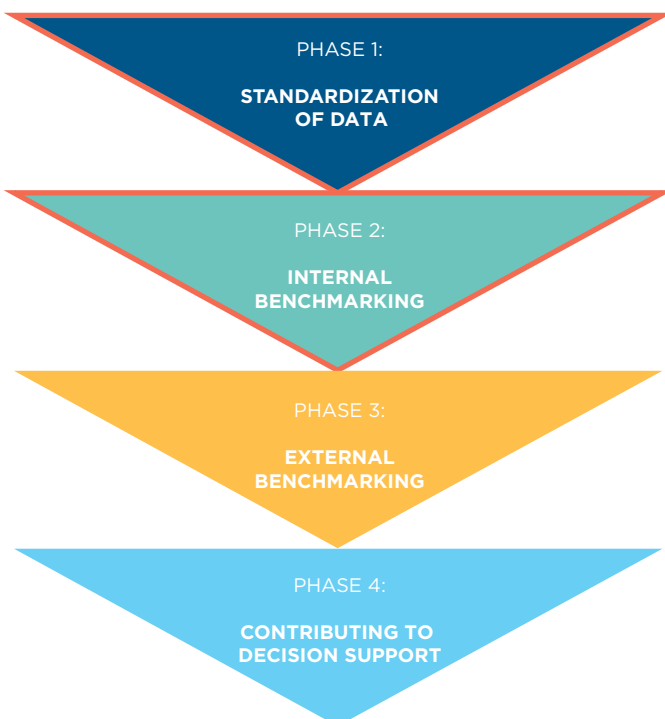
In fact, many university structures could be viewed as inefficient from the perspective of business operations support. Universities historically



evolved in a decentralized fashion, leading to duplicative efforts and sub-optimized structures. In general, higher education trails the private sector in the implementation and application of technology. However, this landscape has begun to change. We believe that efforts to consolidate distributed administrative structures throughout a university will accelerate, primarily as a cost-saving measure, but that these efforts will have more significant consequences as well. We anticipate this trend will continue in the form of a “shared services” design, which parallels and empowers the shared governance model that has become integral to the institution.

A central question is how universities will measure operational efficiency, effectiveness and relative “right size investment” against their peers — especially in the absence of government intervention for the purpose of normalizing data. Our belief is that higher education is in the midst of an evolution that will ultimately produce an enormous emphasis on peer performance benchmarking.

Figure 4. Phases of Healthcare Transformation



III. The Path Forward

PHASE II MATURATION

In our observation, higher education has transposed the first two phases of the benchmarking evolution that occurred in healthcare (see Figure 4). Universities have been benchmarking internally for some time, since it is easier to standardize data after developing an intimate knowledge of the institution. However, this sequence has not yet led to significant efforts to standardize data across institutions — which is a prerequisite to valuable external benchmarking, including peer performance benchmarking. We believe that both Phase I and Phase II must be more thoroughly developed, not only for the benefits of current and local analysis, but also in order to prepare universities to evaluate themselves against external peers as data standardization matures across the industry. Universities failing to cultivate an in-depth understanding of their labor cost structure, for example, and to chart a strategic path forward face potentially more onerous challenges in the longer term.




CHALLENGES WITH EXISTING DATA REPOSITORIES

A number of these data repositories currently exist, but these data do not typically provide both the breadth and specificity required for meaningful benchmarking analysis. Institutions are challenged to gain a full a complete picture of their cost structure as they make strategic decisions around program portfolios, services and investments in infrastructure and human capital. The Integrated Postsecondary Education Data System (IPEDS) collects fairly detailed data related to enrollment and student persistence, but its operational data is typically at an enterprise-wide summary level and is two years old. The Delaware Study is an excellent resource but is limited to teaching loads, cost of instruction and research funding. Other niche data sets include CUPA (human resources), EDUCAUSE (technology) and Sightlines (facility spend). Each of these tools serves a purpose for distinct and tailored analysis, but even a cursory

look at the industry reveals that a dataset focused on a breath of detailed operational metrics has yet to emerge. In short, there is no single clear data source for detailed apples to apples comparisons across a wide array of operational factors.

OPTIONS FOR STANDARDIZATION

We believe that nascent pressures, comparable to those in healthcare, will now force universities to normalize data. Three options exist for universities to respond to these pressures:

-  Develop data-sharing reciprocity agreements with select peers
-  Leverage the use of third-party data aggregators
-  Contact a third-party advisory firm

Each of these tools serves a role for distinct and tailored analysis, but when compared to what is available in healthcare, there is a significant void for overall administrative labor cost analysis — especially on an activity cost based perspective.

We expect consortiums to form around private sector providers that will offer analyses and subscription services, which universities will leverage for competitive evaluation. Absent government intervention, we believe private sector entities are most likely to surface as the leaders in this effort due to the complexities involved with making cross-institutional comparisons in the higher education market.

Universities should plan to chart the maturity curve incrementally, beginning with internal benchmarks, followed by external benchmarks and advancing to a comparison against best practices for a similarly profiled and mission-oriented institution. The selection of peer institutions to be used for competitive external benchmarking will be an important consideration. For select operational metrics, more analytically mature organizations may consider looking to peer sets outside of higher education. However, we

believe that this approach is best explored with knowledgeable third-party consultants who can bring perspectives from other industries.

THE UNIQUE CONTEXTUAL ELEMENTS OF HIGHER EDUCATION

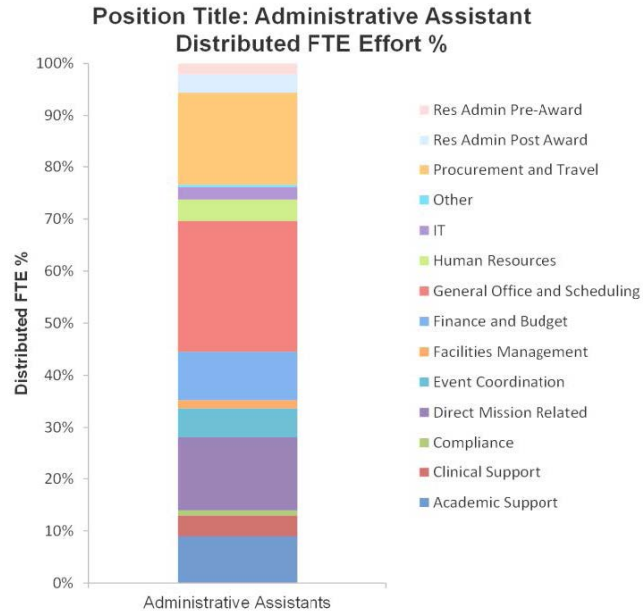
Two aspects of the higher education landscape contribute to challenges regarding operational benchmarking. First, varying degrees of centralization. Universities may vary significantly in the degree to which business support activities are centralized versus decentralized and the degree of centralization commonly varies by function and activity. Second, role fragmentation. Significant portions of business and administrative processes are supported by unit-level staff with highly fragmented roles, that is, they are generalists who support a little bit of a lot of things (of which most of whom have not received specialized training).

A university function’s degree of centralization also impacts the scope of responsibilities at the unit level. For example, the role of a grants and contracts office varies from institution to institution. At University A, the grants and contracts office serves primarily in a reviewing and authorizing capacity while the majority of reporting is handled at the local level. At University B, this office handles the majority of the reporting effort for the sponsored awards, removing responsibility from unit-level grant administrators. In this example, the unit-level grant administrator has a disparate set of responsibilities making it difficult to compare the two institutions for the purposes of unit-level post-award support.

Universities are also challenged by the prevalence of role fragmentation. Commonly, roles with titles such as administrative assistant at the college or department level have portfolios extending well beyond clerical into the business support realm. It is fairly common for unit-level “assistants” be tasked with activities in finance, HR, communications and perhaps research administration. Universities, without the aid of time consuming and difficult to administer activity surveys, struggle to capture how these unit-

level generalists allocate their effort. As a result, benchmarking analyses based solely on title will undoubtedly under-report the amount of effort applied to critical areas of business support. To yield actionable results, benchmarking data ideally captures effort toward specific activities.

Figure 5. Phases of Healthcare Transformation



only be taken so far. Universities will need to reach outside of their organizations for guidance and industry best practices. Once institutions determine they must look beyond their own campuses, there is an increased impetus for the use of third-party support. Consultants and third-party data aggregators will play a key role as universities begin to leverage external benchmarking in Phase III and Phase IV of maturation for strategic decision support especially in terms of cost reduction. These data should aid in the analysis of costs related to operational infrastructure, facilities and research support, student support and administrative operations support. Specifics included would be determining mission-driven assessments of under or over investment in resource allocation priorities, similar to what has occurred in healthcare. “Are we under-invested in student services compared to our peers?” or “Are we over-invested in research administration and how can we become more efficient?” The era for transformation in higher education is upon us. By considering the role of data-based decisions supported by internal and external benchmarking in healthcare, we believe that higher education will be better prepared for the future.

Conclusion

Trends and evidence suggest that universities will continue to face pressures to further optimize their cost structures with a key emphasis on labor costs. The challenge will be determining where these opportunities exist, and to what scale, within the vast and complex university ecosystem. Organizations — private and public sector alike — are frequently guilty of identifying to a solution before ensuring the right question is on the table. Performance benchmarking is an effective tool for surfacing potential opportunities for improvement and for providing a data-driven hypothesis to support investments in cost reduction.

Collectively, these factors will help usher colleges and universities down an analogous path previously charted by the healthcare industry. Internal cost analysis is a good start but can

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The Academic Benchmarking Consortium was established in 2014 to specifically address this issue through the creation of an innovative alliance of top universities. The breakthrough technology used by the consortium is a proprietary software package (ABC Insights®) and mapping approach that captures all administrative payroll data and maps it into meaningful activity cost buckets (Finance, Human Resources, Information Technology, Facilities, Research Administration, Communication, Development and Student Services), as well as identifying Centralized, Decentralized, Shared Services and Outsourced labor costs for each activity.

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