

Streamlining Provider Credentialing Across Leading Health Systems

Case Study on University Hospitals and Axuall

Alex Marrinan-Duke, Analyst, Research & Advisory

Jackie Risco, Associate Director, Research & Advisory

Introduction

The evolving healthcare industry has seen rapid advances in technological innovation and relentless change across the reimbursement and regulatory landscape. As such, Leading Health Systems (LHS) seek innovative solutions to solve economic and operational challenges in every domain of the business. The provider credentialing and privileging process has historically been an overlooked and strictly administrative function within the health system. Complexity and verification delays in the provider credentialing process can impact LHS revenue, patient access, and the quality of clinical care delivered. However, recent advances in provider credentialing technology have offered LHS innovative solutions that promise to streamline the provider credentialing process. Provider credentialing technologies offer LHS the ability to reduce delays with credentialing and privileging providers, improve patient safety and quality of care, prevent fraud, and maximize revenue opportunities.

Provider Credentialing Delays Have Multi-Faceted Impacts on LHS Leaders, Providers, and Patients

“Provider credentialing can be a 10-month process in healthcare. It is a metaphor for all the brokenness in healthcare. It is a real thorn in peoples’ side, for financial executives as well as for the actual providers.”

*– President of Innovation and Commercialization,
Leading Health System*

“Physician credentialing has always been an issue for us. There is the credentialing that has to happen to get people into the hospital, and then the credentialing for payers. We struggled because we had those as separate processes. So, we consolidated it because it was in 3 different places.”

– Former CFO, Leading Health System

As LHS leaders seek to improve their ability to cost-effectively serve patient populations through flexible delivery channels, adaptive networks, and a reduction in unnecessary delays, the need to employ enabling technologies has increased significantly. The following case study was conducted by The Health Management Academy (The Academy) and Axuall, Inc. – a national digital credential network.

Research objectives include:

1. Understand key challenges LHS face with provider credentialing;
2. Identify the extent to which this historically administrative function is leveraged as an opportunity to achieve economic and operational efficiencies within the health system;
3. Outline University Hospitals’ approach to provider credentialing through their partnership with Axuall. University Hospitals is one of the nation’s leading healthcare systems, providing patient-centered care through 28,000 providers and employees.

Spotlight on Axuall

Axuall is a national real-time network that streamlines the secure sharing of digital credentials between healthcare workers, credential issuers, healthcare organizations, and auditors to reduce barriers to clinical workforce deployment.

- Axuall’s solution leverages blockchain technology to ensure that credentials are signed by authorized verifiers and have not been tampered with. This enables a global network of thousands of verification sources through direct connections and partnerships.
- Axuall’s solution features a digital credential holder wallet that allows practitioners to proactively manage, monitor, and share their digital credentials with healthcare organizations that must comply with standards and bylaws.
- Axuall’s solution complements and integrates into enterprise human resources (HR), credentialing, and compliance systems, providing credential portability and support for existing workflows and processes.

Methodology

The following case study draws upon research conducted by The Academy in partnership with Axuall and University Hospitals from August to December of 2020. The Academy conducted qualitative interviews with LHS executives regarding their provider credentialing strategies. The Academy also collected quantitative data from University Hospitals to estimate the business case and financial return for University Hospitals' use of Axuall's digital credentialing network. Supplemental quantitative data was collected across a variety of sources, including The Academy's proprietary database and third-party sources.

The 11 total qualitative respondents represent 8 unique health systems: Advocate Aurora Health, Banner Health, ChristianaCare, Duke Health, RWJ Barnabas Health, Sharp HealthCare, Spectrum Health, and University Hospitals. Respondent roles included Chief Financial Officer, Vice President of Finance, President of Innovation and Commercialization, Vice President of IT and Services, Vice President of Operations and Logistics, Chief Operating Officer of Physician Network and Clinical Institutes, Vice President of Operational Effectiveness, Pediatric Neurosurgeon, Chief Executive Officer of the Medical Group, President of the Medical Group, and Chief Medical Officer of the Medical Group. The responding health systems have an average Net Patient Revenue (NPR) of \$4.1 billion, an average Total Operating Revenue (TOR) of \$5.3 billion and own or operate a total of 123 hospitals.

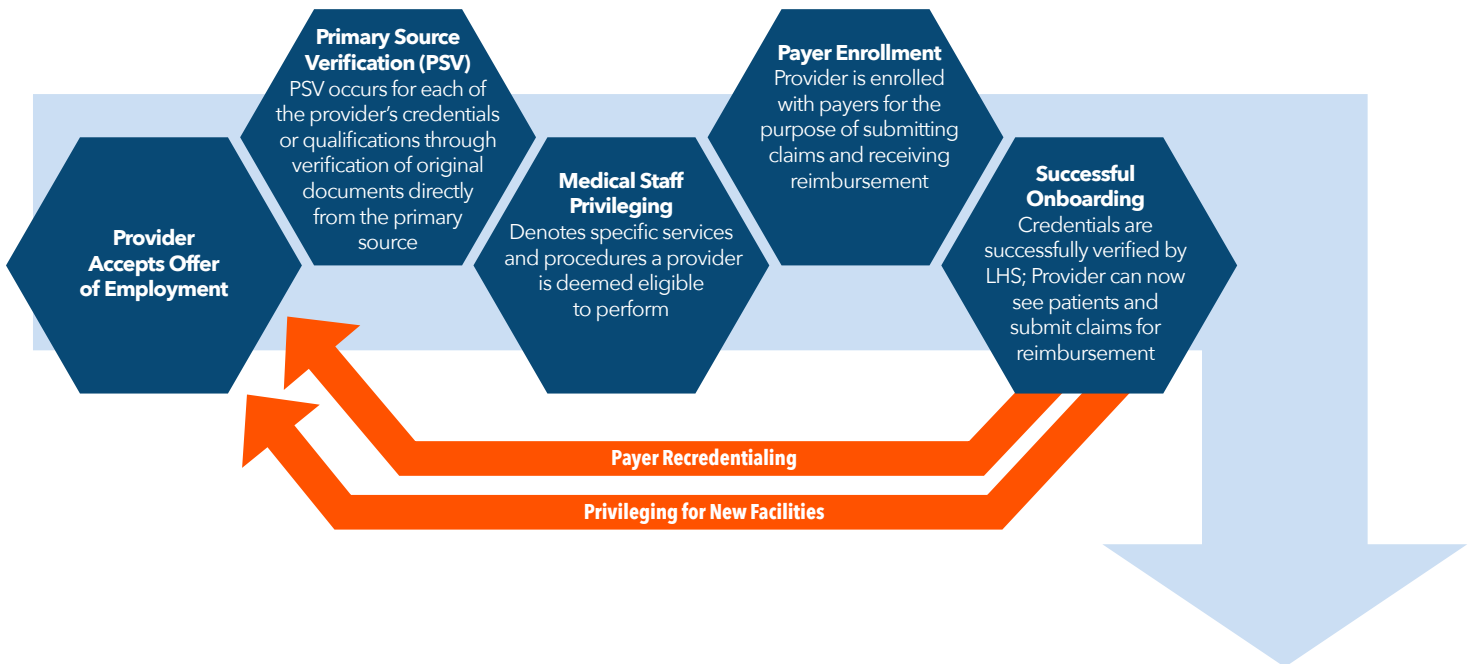
Provider Credentialing Landscape & LHS Pain Points

Provider credentialing is defined as the process of obtaining, verifying, and assessing the qualifications of a practitioner to provide clinical care services in or for a healthcare organization. The process of obtaining provider credentials and qualifications ranges from collecting evidence of licensure, education, training, and experience, to ensuring no significant past sanctions or adverse events exist that may threaten patient safety.

A key component of the provider credentialing process requires that a clinical entity obtain a provider's credentials directly from the primary source that granted them, known as Primary Source Verification (PSV). Examples of primary sources include licensure boards, medical schools, nursing schools, residency training programs, etc. This process extends to any clinical care provider, including physicians, Advanced Practice Providers (APPs), and other types of independently licensed providers. The PSV process, in many cases, is manual, labor-intensive, and at risk for unnecessary redundancies.

In addition to the PSV process, providers may also need to complete medical staff privileging at each facility and be credentialed through the provider enrollment process with payers. Patients, providers, and health systems are each uniquely impacted by delayed or inefficient processes across the entire provider credentialing continuum. As such, many LHS seek streamlined solutions that would reduce the overall burden on system resources and staff.

Figure 1. LHS Provider Credentialing Process



Credentialing delays lead to:

Patient leakage

Provider dissatisfaction

Missed organizational revenue

Patient access issues are a leading cause of leakage

As LHS continue to face declining operating margins, preventing loss in patient revenue remains a top priority. Health systems are consistently at risk of network and referral leakage, whereby patients seek out or are referred out of network by healthcare providers. However, LHS executives struggle to understand the total amount of patient revenue potentially lost to leakage because the underlying causes of patient leakage vary from health system to health system. For many LHS executives, access to care is the leading cause of patient leakage and has numerous long-term implications. For example, timely access to care is critical to population health management and ensuring positive clinical outcomes for patients in the long-term.

To boost access, many LHS executives seek to solve physician shortages with faster credentialing processes, particularly within service lines where physician shortages are more common, i.e., behavioral health, hematology, etc. Streamlining provider credentialing processes can support LHS in their efforts to increase patient access and decrease workforce shortages for physicians and APPs.

"If you have lost a patient because they couldn't get in to see a provider, that's lost revenue due to patient access issues. In competitive specialties, you're going to lose patients to other hospitals in your market. That's revenue that is potentially lost forever. Further, patient quality and experience is really important, however, we struggle with understanding how to measure that. Understanding these metrics could really influence the value that a health system finds in streamlining the credentialing process."

- Physician, University Hospitals

Provider satisfaction is often impacted by delays in and complexity of the credentialing process

A seamless onboarding experience is a strategic advantage LHS can use to recruit and retain top provider talent in an increasingly competitive market. Providers bear the repercussions of lengthy credentialing processes at the start of their tenure with each new employer and throughout their entire career. All providers must go through the credentialing and re-credentialing process upon being hired, switching entities, and adding privileges from a new facility. Providers must also be certified and re-certified by the Centers for Medicare & Medicaid Services (CMS) on a regular basis. While some LHS providers describe the credentialing process as seamless, others describe it as a time-consuming barrier to efficient care delivery. LHS providers interviewed expressed that a lengthy credentialing process may lead to lower satisfaction with their hospital or employer.

Additionally, inefficient or delayed provider credentialing can lead to undue strain on the LHS clinical workforce. Increased rates of provider burnout have been attributed to minimal workforce elasticity. For example, clinical staffing shortages caused by inefficient credentialing processes can often lead to unmet patient demand, increased clinical staff burden, increased provider safety issues, and increased attrition as a result of provider burnout.

Providers Eager to Maintain Lifelong Digital Credentials

"I can be in good standing with my hospital, with CMS, and with all third-party insurance companies that I work with. At the end of the day, that doesn't matter. As soon as I go to the next hospital, I still have to get credentialed again with that hospital, and reshare all of this data. It is time consuming and annoying."

- Physician, Leading Health System

"If the entire healthcare ecosystem were to update to a portable digital wallet for credentialing rather than the traditional process, it could remove pain for physicians and APPs. It's difficult to put a dollar amount on that."

- President of Innovation and Commercialization, University Hospitals Ventures

Organizations face losses in downstream revenue as a result of lengthy credentialing processes

LHS executives report that clinical workforce capacity and elasticity has a significant impact on revenue generation. The national average credentialing time for providers is about 90 to 120 days¹, which can have a drastic impact on number of patients seen, prescriptions written, medical procedures performed, and ultimately, total revenue generated. Further, administrative costs are also top of mind for LHS, including the cost of backfilling clinical providers, overtime paid out to backfilled providers, overtime paid out to administrative staff, and the cost of using locum tenens feeder organizations in order to fulfill temporary medical staffing needs.

Streamlining the provider credentialing process can also help prevent disruptions in the care delivery and billing cycle process. LHS executives often face challenges with the payer re-credentialing and enrollment process required for each provider. This process can result in denied claims and out-of-network billing for patients if providers are not routinely re-credentialed with each payer.

¹ 2019 Physician Inpatient/Outpatient Revenue Survey. (2019, February 25). Retrieved October, 2020, from https://www.merrithawkins.com/uploadedFiles/MerrittHawkins_RevenueSurvey_2019.pdf

LHS Leaders Face Financial Tradeoffs due to Credentialing Delays

"When it comes to delays in provider credentialing, we don't think about it as delayed revenue, we think about it as lost revenue. The sooner that a physician is credentialed, the better. If I'm going to schedule you for an X-ray, and I schedule you for tomorrow, you come in tomorrow and I make that money. But if I schedule you in 2 weeks, you might go down the road to a competitor and we may lose you to another provider. Anything we defer or delay, we don't expect to recoup at 100% due to leakage. Anything you defer will never come back to you 100%. This is why we've put so much focus on streamlining our credentialing process."

- President, Medical Group, Leading Health System

"When I look at provider credentialing, I look at the incremental cost of having to go through privileging each time with each hospital. It's not just dealing with the state licensing board, but also the time for your staff and the time they spend on this process."

*- Chief Financial Officer,
Leading Health System*

Axual's Work with External Staffing: Telehealth & Locum Tenens Organizations

In addition to supporting LHS to centralize and streamline their provider credentialing process, Axual also works directly with telehealth, locum tenens and staffing organizations to help LHS fulfill their clinical staffing needs. Through their partnership with Hyr, providers that have been credentialed through Axual's technology solution can quickly and safely fulfill locum, contingent, permanent, and telehealth staffing needs at partnering LHS across the country. The Axual-Hyr partnership services health systems and medical groups that face clinician shortages and can help organizations act quickly when facing increased demand in credentialing for both in-person and virtual care across state lines (i.e., COVID-19 pandemic).

"Hyr has partnered with Axual in order to ultimately transform the way in which a doctor applies for a job. Axual is the turbocharged engine in our car. With Axual, the credentialing process is being completed in such a short amount of time and is truly unheard of in terms of speed and level of quality."

- Manoj Jhaveri, Co-Founder & CEO, Hyr, Inc.

Spotlight on Hyr, Inc.

Hyr Medical's full-service, national staffing network enables physicians/APP's and medical practices to connect online for contingent, locum and permanent opportunities. Through their strategic partnership and integration with Axual, they enable their clients to reduce total staffing time from months to only days, while simultaneously raising the bar on provider quality. There is no fee to join and post jobs on Hyr. Their contingent/locum staffing rates and permanent placement fees are among the lowest in the industry, in large part due to their digital business model.

COVID-19 has increased demand for seamless provider credentialing

Missed revenue has become an even more prominent issue for health systems to tackle due to thin margins exacerbated by the COVID-19 pandemic. In the aftermath of COVID-19, LHS will be faced with having to build out clinical resources quickly and effectively in order to recapture revenue lost in the pandemic.

The pandemic has also presented unique staffing challenges for LHS, including clinical workforce shortages during peak seasons. As LHS prepare for upcoming COVID-19 and flu surges, they face an impending need to expedite the provider credentialing process, particularly for telehealth providers and APPs. In light of the increased demand for telehealth services, multi-regional LHS must tackle the challenge of credentialing providers across state lines. A seamless onboarding and credentialing process will only help to reduce the overall burden on COVID-19 staff, provide a better patient care experience, and ultimately decrease leakage rates.

Partnering on Digital Solutions to Reduce Delays in the Provider Credentialing Process

University Hospitals' Partnership with Axual

In 2019, Axual and University Hospitals entered into a strategic collaboration and business alliance to develop and test new mechanisms and workflows to reduce the time it takes to deploy qualified clinical staff and meet growing patient demand. Axual and University Hospitals' Ventures group began to work together in 2018 to identify opportunities to leverage blockchain and digital identity to fundamentally improve the way the health system attracts, verifies, and deploys clinical talent. The two organizations have since implemented a three-phase pilot program, in accordance with organization by-laws, that is led by clinical and operational leaders across University Hospitals.

University Hospitals is a not-for-profit health system headquartered in the Midwest, has a Net Patient Revenue (NPR) of \$3.9 billion, a Total Operating Revenue (TOR) of \$4.1 billion, and operates 19 hospitals. The following section describes University Hospitals' provider credentialing journey and draws upon quantitative and qualitative data collected from University Hospitals to estimate the business case and financial return for University Hospitals' use of Axual's digital credentialing solution.

University Hospitals' Provider Credentialing Journey

Prior to their partnership with Axuall, University Hospitals implemented an initiative to centralize their highly disparate provider credentialing processes. Following the recent centralization initiative, University Hospitals saw an additional opportunity to maximize the efficiencies gained, particularly as it relates to external Primary Source Verification (PSV). To operationalize this work, University Hospitals sought out support from external digital credentialing organizations across the country that would complement their internally centralized provider credentialing process.

In 2019, University Hospitals Ventures—a division dedicated to seeking innovation and commercialization opportunities on behalf of the health system—solidified the partnership with Axuall and initiated the digital credentialing pilot program in February of 2020. As the partnership continues, University Hospitals Ventures will act as a neutral party when evaluating the efficacy and ROI of the solution.

Axuall's Network Serves Providers and LHS Leaders Alike

"We considered a multitude of solutions to try and address our provider credentialing inefficiencies, including robotic process automation (RPA). We found, however, that Axuall's service is different than RPA. It would negate the need to enlist services from RPA companies. As I see it, Axuall's solution is a blockchain-enabled, complete, and chronological history of a physician in one centralized spot. It's verified, validated, and all I would have to do is complete that process for each provider. If there is a central group, like Axuall, that can do that, that eliminates waste from an administrative perspective."

- VP of Finance, University Hospitals

"Axuall's user interface is user-friendly and easy to use. It collects your data and presents it in a great format. As a physician, you would have access to your digital wallet of credentials forever. Axuall not only helps health systems articulate challenges with physician credentialing to health system leaders, but it also demonstrates the value in dollars saved that can impact the business model."

- Physician, University Hospitals

University Hospitals' Digital Credential Pilot Methodology

University Hospitals and Axuall conducted a multi-phase pilot during 2020 that evaluated the applicability, effectiveness, and return-on-investment potential relative to the use of Primary Source Verification (PSV) obtained through the use of the digital credential network. Key evaluation metrics included:

- **Proof-of-Concept:** Verification that the technology provides a secure and effective mechanism to collect, store, and share digital credentials between issuers, providers, and the healthcare system.
- **Policy Adherence:** Verification that the technology and the methods by which it will be used, will align to organizational by-laws and standards bodies requirements.
- **Usability & Interoperability:** Verification that providers can effectively use the technology to establish their digital credential wallets, review their credentials, and share them with the health system, in a format that can easily populate enterprise credentialing, HR, and compliance systems. The pilot showed that over 80% of participating physicians were able to fully complete the process in an average of 15 minutes.
- **Economies of Scale:** Conducted multi-disciplinary impact assessment of digital credentials' ability to improve patient access, reduce leakage, address provider burnout, and capture additional revenue.

"Labor management is a big priority. We have a Unit of Service (UOS) for every department, and sometimes multiple UOSs across the department. The UOS to measure for this pilot program would be 'providers credentialed.' If we're going to credential 3,000 physicians next year, we need to know what the administrative workforce needs to look like."

- VP of Finance, University Hospitals

The Economics of Leveraging a Digital Credential Network at University Hospitals

University Hospitals directly employs or has a primary affiliation with approximately 3,700 physicians and billable APPs, with an additional 500-750 new individuals joining annually when accounting for growth and attrition rates. According to a 2019 Merritt Hawkins study conducted across approximately 3,000 hospital Chief Financial Officers (CFOs) and other financial executives nationwide, the average annual revenue generated by the average physician is \$2.4 million, or \$9,230 per day worked.¹

Based on historical data compiled from University Hospitals, the average time it takes to complete the credentialing process with the organization, from application through a physician's first privilege grant, is 78 calendar days. Considering several factors, including an average of eight weeks' notice to previous employers, a conservative estimate is that there are approximately three weeks that can be eliminated by utilizing the Axuall Network.

Multiplied by the average daily workday revenue of \$9,230, adjusted down 50 percent to \$4,615 to accommodate a new physician's ramp-up capacity, University Hospitals' savings potential is estimated to be approximately \$74,000 per new physician hire based on a

¹ 2019 Physician Inpatient/Outpatient Revenue Survey. (2019, February 25). Retrieved October, 2020, from https://www.merrithawkins.com/uploadedFiles/MerrittHawkins_RevenueSurvey_2019.pdf

savings of 16 workdays. If University Hospitals leveraged the Axuall Network for only a quarter of the newly onboarded physicians per year, there is an opportunity for additional revenue capture of between \$9.2 million and \$13.9 million per year. It's important to note that this savings potential will vary by specialty, incoming physician characteristics, and other factors. Nonetheless, the opportunity to increase revenue and cash flow, improve patient access, and reduce provider burnout is profound.

“What we are trying to solve for is the time value of money and the experience component of the credentialing process for providers. It really didn’t take long for me to find almost anyone at the health system that was having issues with the provider credentialing process. If there is a way to streamline, accelerate, and facilitate a specific experience, there are individuals across the health system that are very interested. This is how we determined our partnership with Axuall may be a success.”

- President of Innovation and Commercialization, University Hospitals Ventures

Figure 2. The Economics of Leveraging a Digital Credential Network at University Hospitals

Patients	Outpatient Procedures	10.8 million
	Inpatient Discharges	142,000
	Patients Served	1.2 million
Providers	Employed & Affiliated Physicians	3,700
	Expected Annual Growth in New Physicians	500-750
Time-to-Money Savings	Average Time to Complete Credentialing at University Hospitals Prior to Use of the Axuall Network	78 calendar days
	Time Saved Using Axuall Network	3 weeks (16 workdays)
	Average Revenue per Existing Employed/Affiliated Physician per Day Worked	\$9,320
	Adjusted Average Revenue per New Physician per Day Worked (adjusted to 50% capacity)	\$4,615
	Potential Savings Per New Physician	\$74,000
	Potential Savings for 25% of Newly Onboarded University Hospitals Physicians Per Year	\$9.2 million - \$13.9 million

Note: The data included in the figure above is specific to University Hospitals. Expected savings are subject to change based on organizational structure and specific onboarding dynamics.

Informed Practices for LHS

As LHS continue to face numerous advances in telehealth and emergency preparedness amid the COVID-19 pandemic, the need to adaptively extend their clinical workforce capacity and rapidly scale a temporary or telehealth-equipped clinical workforce has never been more apparent. LHS that identify provider credentialing as an opportunity to achieve economic, operational, and clinical gains will be better prepared for long-term success in this new healthcare market.

LHS that will be prepared for the new healthcare market may be those that:

1. Seek internal or external support to reduce delays in the Primary Source Verification (PSV) process.
2. Seek internal or external support to enhance the provider credentialing process beyond PSV, including expanding support for provider recruitment, expanding support for credentialing medical students and medical residents, and expanding support for the payer credentialing and re-credentialing process.

In an effort to shed light on the provider credentialing market, Axuall will moderate a series of LHS-centric webinars in early 2021.

Methodology

In August-December 2020, The Academy conducted quantitative surveys as well as in-depth telephone interviews with executives at University Hospitals and Axuall around provider credentialing processes. None of the participants derived any personal profit or gain through participation in this case study.

The Health Management Academy

The Health Management Academy (The Academy) is a membership organization exclusively for executives from the country's Top-100 Health Systems and most innovative healthcare companies. The Academy's learning model identifies top priorities of health system leaders; develops rich content based on those priorities; and addresses them by convening members to exchange ideas, best practices, and information. The Academy is the definitive trusted source for peer-to-peer learning in healthcare delivery with a material record of research and policy analysis. Offerings include C-suite executive peer forums, issues-based collaboratives, leadership development programs, research, advisory, and media services. The Academy is an accredited CE provider. More information is available at www.hmacademy.com.

About Axuall

Formed in 2018, Axuall, Inc. addresses the national imperative to improve access to quality healthcare by helping to eliminate unnecessary inefficiencies in workforce deployment. Axuall is a national identity and credential network that enables clinicians, healthcare systems, and primary source institutions to share and manage authenticated credentials in real-time. With this, Axuall addresses the information problem at the center of workforce readiness, empowering health systems to accelerate the time-to-deployment of qualified healthcare professionals, while at the same time reducing physician burnout. With over 10 million healthcare workers in the United States, the need to efficiently and accurately account for qualifying credentials is paramount to meeting market demand and safety.

For more information, please visit <https://www.axuall.com/>

The Academy extends its appreciation to Axuall for their sponsorship of this project.

The logo for Axuall features the word "axuall" in a dark blue, lowercase, sans-serif font. The letter "x" is stylized with two purple, curved lines that intersect at the center, forming the shape of the letter.

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