

# Transforming Practitioner Identity and Credentialing with Blockchain

Hashed Health LLC

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An opportunity exists within the healthcare market to create a disruptive and transformative solution addressing the historic challenges facing practitioner credentialing. Credentialing is a mandated— and largely nonstandard—process utilized throughout the industry to ensure that a healthcare practitioner can competently deliver patient care within a specific clinical setting (e.g., hospital, outpatient clinic, telehealth provider). Within the private sector, practitioners (e.g., MDs, PAs, advanced practice nurses) must also be credentialed by every payer contracted for reimbursement by that organization. Malpractice insurers, volunteer organizations (NDMS, et. al.), the military, and Medicare/Medicaid all require various forms credentialing as well. This often results in practitioners maintaining redundant credentials information with 12-25+ independent entities across the market.

The process for initially completing credentialing for a newly hired/contracted practitioner often takes 4-6 months from recruitment, appointment, and completion of payer enrollment. An initial credentialing “episode” costs an organization, on average, between \$800 and \$1,400+ to complete staff appointment with payer enrollment costing an additional \$2000 to \$3600+ depending on the number and complexity of contracts maintained by the organization<sup>1</sup>. Practitioners cannot bill for services until this work is completed (with a few exceptions from Medicaid/Medicare). In the hospital setting, the average physician net revenue forfeited from delays in this process is approximately \$7,500 per day<sup>2</sup>.

Credentialing must be re-performed every two years for care delivery organizations and every three years for payers. In the interim, all expirable credentials (e.g., licenses, board certifications, DEA clearances) must be tracked and confirmed to be active and unlimited. Finally, healthcare organizations should be actively monitoring numerous sanctions issuing authorities (e.g., OIG, licensing boards, etc.) regularly to monitor compliance with all members of their clinical staff. Delays, inefficiencies, miscommunications, and errors in these processes directly impact recruitment, revenue cycle, cost, quality of care, and retention.

Our firm seeks to develop and deploy a comprehensive solution that provides the healthcare industry with a common utility for collecting and distributing credentialing information by and between market constituents—regardless of systems or methods used locally. At its core, the solution will form an *exchange* providing members with both access to verified credentials information and a means for contributing verified information for other members to acquire. Further, exchange members can define the specific data, artifacts, rules, and validation checks for the various types of employees (e.g., practitioners, specialists, AHPs) requiring credentials for their organization—receiving this information in the form and substance relative to their *specific* rules and requirements.

The exchange platform itself will exist as a highly secure, massively scalable, 100% cloud-based solution leveraging PaaS, advanced database, artificial intelligence, and blockchain technologies. The platform will also be multi-lingual and occupationally agnostic. We will leverage the Phoenix platform—originally developed by Tenon Consulting for managing complex military healthcare credentialing transactions—as a foundation for the exchange. We

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<sup>1</sup> With the exception of NCQA accredited credentialing organizations that employ delegated credentialing agreements with payers. As of January 2018, there are approximately 186 organization maintaining this accreditation.

<sup>2</sup> According to the [Merritt Hawkins 2016 Physician Inpatient / Outpatient Revenue Survey](#)

will integrate blockchain technology to create irrefutable transactional optics and validity regarding the source and provenance of all credentialing data. This capability alone will eliminate a substantial portion of the redundant collection and reverification of this data across the counterparties involved in credentialing episodes. Analytically, the platform will assess credentialing data heuristically to ensure compliance with the rules and requirements governing credentialing activities for each member. Collectively, the platform will create a trusted, reliable utility capable of serving all members of the healthcare market and transform the way this work has been historically performed.

The value proposition for the exchange has many facets. For healthcare delivery organizations, our solution will reduce administrative costs, practitioner onboarding cycle time, and revenue forfeitures. Payers will enjoy reduced costs, timely updates to practitioner data, and accurate directory information. Practitioners can consolidate and manage their credentialing requirements within a unified “profile” meeting the cumulative needs of all parties requiring this information and greatly reduce the risk of falling out of compliance with a specific organization or payer. Primary data sources (e.g., employers, malpractice insurers, post-graduate education programs) can both simplify their own credential gathering/verification processes and substantially reduce the redundancy of requests for their information. Credentialing and provider management software vendors, through direct integration with the exchange, can leverage its efficiencies to drive new sales, upgrades, and versioning compliance with their legacy clients. The market, as a whole, will realize substantial value through the elimination of redundant work, coordination and concurrency of data, and the elimination of credentialing-oriented impedances in growth areas such as telemedicine, outpatient clinics, direct-to-patient care, and other new channels of care delivery.

The revenue model for the exchange will consist of a simple census-driven annual membership fee and transaction fees supporting the performance of scheduled credentialing episodes. During the initial pilot phase of the exchange, we will be working with our early members and partners to determine the most effective method for pricing individual verified credential elements supplied by members. We will also enable fee-for-data sources (e.g., background screening firms, NPDB, et al) to pass through their fees to members through exchange. Finally, we believe a substantial international market exists for these capabilities and will look to expand into those markets after our initial entry into the US market.

Our launch team is comprised of proven leaders in both the subject matter area and the development of successful, enterprise-level technology solutions. Hashed Health is internationally recognized as the leading force driving blockchain-based solutions into the healthcare market. Finally, we are developing a consortium of leading industrial participants to aid the firm in developing the exchange, piloting its operations, and proving its value propositions. Collectively, our team is exceptionally well positioned to complete the initial build phase, validate the solution through a well-managed pilot process, and initiate its commercial growth.