

LER TOOLKIT CASE STUDY COLLECTION

Improving Background Screenings for Healthcare Workers and Providers

Prepared By:

Etan Bernstein, Naomi Szekeres (VNF), Velocity Network Foundation Healthcare Cluster Adoption Team (HCAT), and Kelly Page (LWYL Studio).

September 2025

The U.S. healthcare sector grapples with critical labor shortages and lengthy onboarding processes. To address these challenges, the Velocity Network Foundation (VNF), in collaboration with 20+ partners, launched a two-year program called SkillsONWARD to deploy verifiable digital credentials (VDCs) in Florida and Texas. The initiative seeks to accelerate credential primary source verification (PSV), reduce friction in hiring, and improve overall workforce mobility, ultimately enhancing the quality and speed of patient care.

Case Study Details

Scope: Texas and Florida

Sector: Healthcare

Industry: Background Screenings

Focus: Improving background screenings for healthcare workers

Citation: Bernstein, E, Szekeres, N., VNF HCAT, and Page, K (2025). *Improving Background Screenings for Healthcare Workers and Providers*, LER Toolkit Case Study Collection, U.S. Chamber of Commerce Foundation (USCCF), September 2025.

Introduction

Launched in 2023, SkillsONWARD is a collaborative initiative involving over 20 member organizations, including employers, universities, technology vendors, and licensing bodies, working to establish a self-sustaining, interoperable network for healthcare credentialing. The program aims to reach over 50,000 healthcare professionals across Florida and Texas and create a replicable model for other regions. The program aims to significantly reduce the time from job offer to employment start date by issuing cryptographically secure, portable, and instantly verifiable credentials.

Background Screenings

Background Screening refers to the process of verifying a healthcare professional's education, employment history, and licensure to ensure they meet the requirements for a specific role before they are hired or placed. Third-party services like PreCheck or Cive typically conduct this process by gathering and validating information from multiple sources, such as universities, previous employers, and licensing bodies.

Background screening in the healthcare sector is essential for the following reasons:

- ❖ **Patient Safety & Compliance:** Healthcare organizations are legally and ethically required to ensure that individuals caring for patients are qualified and properly licensed. Background screening helps maintain safety and regulatory compliance.
- ❖ **Time-Sensitive Hiring:** Traditional background checks can take weeks, delaying urgently needed hires in a sector already facing labor shortages. Verifiable digital credentials may enable instant validation, dramatically reducing onboarding time.
- ❖ **Trust & Accuracy:** By issuing credentials directly from trusted sources (e.g., nursing schools, past employers), the program reduces human error and fraud risk associated with manual screening processes.

Background screening is not just a formality; it's a critical safeguard and a significant bottleneck that the issuing of verifiable credentials may overcome with speed, trust, and digital efficiency. The SkillsONWARD program aims to accelerate the adoption of instantly verifiable digital credentials within Florida and Texas's healthcare sectors, to increase HR process efficiencies and enhance patient care.

As one partner shared: *"Healthcare employers will be able to dramatically accelerate workforce onboarding and internal mobility at scale, improve*

compliance, unlock innovative employment models, and ultimately increase the quality of patient care.” Jennifer Berres, CHRO of HCA Healthcare.

Participant Engagement

The program engaged significant healthcare providers, including HCA Healthcare, Galen College of Nursing, background screening providers, PreCheck, and Sertifier, among 20+ others. These organizations worked to issue digital credentials tied to education, licensure, and employment history, all leveraging the Velocity Network’s protocol.

The program steering committee defined four key performance indicators (KPIs) to track throughout the program's lifetime:

1. **Number of organizations** (employers, education institutions, licensing bodies, etc) that are registered on the Velocity Network and active as issuers and/or relying parties.
2. **Number of healthcare practitioners** in Texas and Florida who have a Velocity-enabled wallet and at least one career-related credential.
3. **Number of credentials issued** to healthcare practitioners in Florida and Texas leveraging the Velocity protocols.
4. **Number of disclosures completed** by individuals who share credentials with relying parties (employers, background screening companies, staffing companies, etc) to advance their career.

These indicators provide a robust way to track program engagement, adoption, and use across system actors: namely, the organizational entities that serve as issuers, verifiers, or ecosystem intermediaries, credential-holding parties such as learners and earners; the credentials themselves, as well as the act of credential disclosure to advance a career.

Technical Implementation

For the technical implementation, the initiative uses the Velocity Network protocol infrastructure and product stack Linux Verii. A vendor-neutral public permissioned blockchain governed by a collaborative, democratic, nonprofit foundation, the Velocity Network Foundation, to ensure any Verifiable Credentials issued are secure, tamper-evident, and instantly verifiable by authorized parties.

Credentials are issued in compliance with W3C Verifiable Credential Data Model VCDM and Decentralized Identifiers (DIDs) for interoperability and data portability. The project used the Credential Transparency Description Language (CTDL) to

publish over 25,000 healthcare-related credentials in open, machine-readable formats to Credential Engine Registry, facilitating semantic interoperability and enabling credentials to be linked to publicly accessible data for enhanced transparency.

The Velocity Network protocol is wallet-agnostic, meaning any wallet that follows the Velocity Network protocol can participate. To support integration with existing systems, the Velocity Network provides Software Development Kits (SDKs) and Application Programming Interfaces (APIs), allowing developers to build applications that can issue, store, and verify credentials seamlessly.

This robust technical framework promises to empower healthcare organizations to streamline credential verification processes, reduce onboarding times, and enhance workforce mobility, ultimately improving patient care and operational efficiency.

Product Stack

Product Name	Role(s)
Linux Foundation Decentralized Trust (LFDT) Verii Lab open-source stack.	Issuer
Career Wallet (SDK)	Holder credential management
Velocity Network Verifier	Verifier

Credential Model

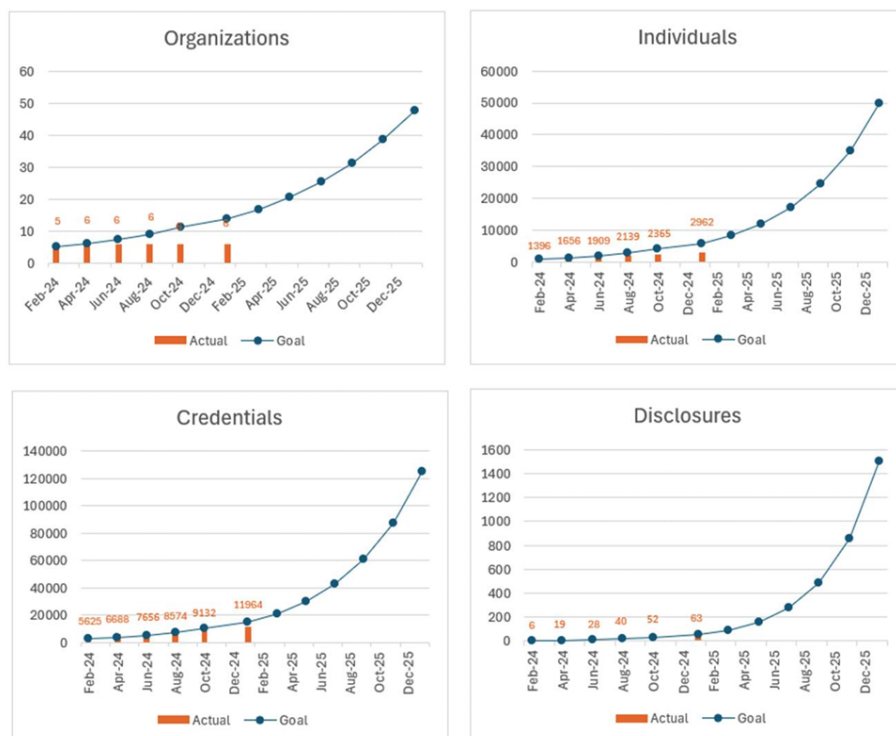
Category	Implementation
Verifiable Credential Data Model Version	VCDM 1.1
Credential Specification	Velocity Network™ supports any credential type that has a JSON schema (e.g., Open Badges 3.0)

Interoperability is critical for verifiable LER credentials and wallet solutions to ensure that the credentials and data can be understood, trusted, and accepted across systems. We invited the project team to share a detailed interoperability profile of the technical specifications and protocol choices they made. A complete interoperability profile is available in the appendix.

Key Findings

The program achieved an impressive 81% opt-in rate among the 47,627 individuals submitted for background checks, indicating strong willingness among practitioners to adopt the new system. 21,475 individuals were notified of a credential offer, with 2,962 claiming their credentials, or a 14% claim rate.

Figure 1. SkillsONWARD Performance Across KPI's
(Feb 2024 - Dec. 2025)



Source: Velocity Network Foundation (2025c)

Several key findings emerged from the program. These included:

- ❖ **Reduction in onboarding time.** The program confirmed that VDCs dramatically reduce onboarding time and support real-time verification of credentials.
- ❖ **Strong Market Interest.** The program demonstrated strong market interest with more than 47,627 healthcare workers opting in.
- ❖ **Need for multi-source data portability.** Credential holders averaged four credentials each, showing the potential for rich, multi-source data portability.
- ❖ **Ecosystem of trust and efficiency.** The system enabled secure, privacy-preserving exchanges between candidates and multiple organizations, fostering ecosystem trust and efficiency.

Another significant finding of this program is that it offers early-stage empirical evidence for the unique potential of blockchain protocols to enable true interoperability in the healthcare sector. In this field, credential regulation, compliance, and accuracy are non-negotiable. By leveraging a public permissioned blockchain, the Velocity Network establishes a shared, tamper-evident infrastructure that enables educational institutions, employers, licensing bodies, and background screening providers to issue, verify, and rely on credentials without a central authority. This decentralized architecture doesn't just digitize existing processes; it re-architects the trust model, giving every actor confidence in the integrity of the data and the ability to interoperate across organizational and technical boundaries.

In highly regulated environments like healthcare, where primary source verification (PSV) is essential, this distributed trust framework is a critical building block for scalable, cross-system interoperability, something point-to-point integrations and siloed databases have consistently failed to deliver.

Challenges and Opportunities

Every implementation has its challenges. Some of the challenges and opportunities identified from the experience include:

Challenges

- ❖ **Lower than expected credential claim rate.** Despite high opt-in rates (81%), only about 14% of healthcare workers claimed their Verifiable Credentials, suggesting a gap in user understanding or ease of use.
- ❖ **Local onboarding delays.** A 2-week delay in onboarding issuers occurred due to local weather-related office closures in Florida.
- ❖ **Education and communication gaps.** Many credentialed professionals may not yet understand the benefits of holding or sharing Verifiable Credentials anchored to a trust framework, which can impact overall engagement and adoption.

Opportunities

- ❖ **Faster, Trusted Hiring.** Verifiable credentials can dramatically reduce time-to-hire by replacing manual background checks with instant, tamper-evident verification.

- ❖ **Scalability to Other States and Sectors.** Success in Florida and Texas creates a replicable model for other states and industries facing similar workforce and credential verification challenges.
- ❖ **Improved Workforce Mobility and Equity.** Credential holders gain control over their records, enabling easier transitions between jobs and potentially improving access to opportunities.
- ❖ **Expansion of Credential Ecosystem.** The program lays the groundwork for broader use of Healthcare open credential data (via CTDL), enabling richer analytics, program improvement, and public transparency across health education and employment.

Recommendations

Recommendations for next steps from the initial stages of the program include:

- ❖ **Enhance user onboarding support** to improve credential claim rates.
- ❖ **Accelerate integration** with additional industry training partners and educational institutions across the U.S., particularly those feeding the healthcare workforce pipeline.
- ❖ **Broaden awareness campaigns** among practitioners to reinforce the value and security of Verifiable Credentials.
- ❖ **Expand the scope of credentials** to create rich healthcare career profiles within wallets, guiding job matching and internal-system mobility.

Conclusion

The SkillsONWARD program is a bold and promising step toward modernizing the healthcare hiring process through verifiable digital credentials. By enabling real-time, secure, and portable credential verification, the Velocity Network Foundation (VNF) is helping healthcare systems respond faster to staffing needs, reduce administrative burdens, and ultimately deliver better patient care. With strong institutional backing and demonstrated technical feasibility, the groundwork is set for national and cross-sector expansion.

Sources

1. Velocity Network Foundation (VNF)(2025a). [Velocity: The Next-Gen Public Infrastructure for Workforce Credential Verification](#).
2. Velocity Network (2025b). [Velocity Networks Basic Building Blocks](#).
3. Velocity Network Foundation (2025c) SkillsONWARD Program January 2025 Status Report.

4. Glover, H. (2025). [Driving Value through Innovation: Verified Credential Insights from Cative PreCheck](#). UpSkill America, The Aspen Institute. April 2025.
5. Credential Engine. (2025) [Credential Transparency Description Language \(CTDL\)](#).
6. W3C. Verifiable Credentials Data Model. <https://www.w3.org/TR/vc-data-model>

Attribution

We extend our gratitude and acknowledgement to the following people, organizations, and funders who contributed to the project.

People	Organizations
❖ Etan Bernstein ❖ VNF Healthcare Cluster Adoption Team (HCAT)	❖ Velocity Network Foundation (VNF) ❖ HCA Healthcare ❖ Galen College of Nursing ❖ Cative PreCheck ❖ Certifier ❖ 20+ Organizations

Appendix: Interoperability Profile

Project teams shared information about the open standards and protocols they used to support interoperability and integration of the end-to-end experience.

Category	Item	Implementation
Product Stack	Issuer Product(s)	Velocity Network
	Holder Credential Management Product(s)	Career Wallet (SDK)
	Verifier Product(s)	Velocity Network Verifier
Identifiers	Issuer Identifier Type	did:velocity did:web , did:ion (deprecated)
	Holder Identifier Type	did:jwk
	Verifier Identifier Type	did:web did:ion (deprecated)
Credential Model	VC Data Model Version	VCDM 1.1
	Credential Specification	Velocity Network™ can support any credential type that has a JSON schema (e.g., Open Badges 3.0)
	Skill Alignment	e.g. OB 3.0 Alignment to registry URL
	Metadata Extensions (e.g., CTDL)	CTDL published by a credential registry may be referenced by alignment
	Skills Library or Framework Used	Various
Security	VC Proof Type / Cryptosuite	JWT VC 1.1 Proof
	Credential Status Method	W3C Status List 2021 stored on DLT
	Credential Expiration	Various

Category	Item	Implementation
	Credential Refresh Method	
	Issuer Authority Confirmation	VN Issuing Protocol, OpenId4VCI (coming soon), VC-API (bulk issuing only)
Authentication	Holder Authentication Method	DID Auth via CHAPI
Delivery	Delivery Protocol to Holder	CHAPI
	VC Export Options	Download JSON-LD
	Presentation Protocol Supported	DIF Presentation Request v1.0
Registries & Discovery	Issuer Registry	Velocity Network™ Registrar
	Verifier Registry	Velocity Network™ Registrar
	Credential Registry	Credential Engine

Source: This Interoperability Profile Template was developed by LWYL Studio from interoperability frameworks developed by Project Unicorn, 2023; CBEN, 2022; SkillsFWD, 2024; EDL, 2024; and LWYL Studio, 2025.