

Title of the Innovation/Practice:

Turing Certs: Revolutionizing Healthcare with Verifiable Digital Health Credentials

Lead Organization(s) and Country/Region:

Turing Space — The Netherlands, Japan, Taiwan.

Problem Statement (100–150 words):

Healthcare systems face significant challenges in verifying credentials, training certifications, and medical records, especially in high-stakes environments such as hospitals and clinics. Traditional paper-based methods are prone to fraud, lost records, and slow verification processes. This delays access to healthcare, especially for vulnerable populations like the adolescents, and undermines trust in health systems. In maternal and child health care, where the stakes are high, ensuring that healthcare professionals have verified qualifications is critical to providing quality care and improving health outcomes.

The ability to quickly validate health professionals' credentials is critical to patient safety and operational efficiency, especially in urgent healthcare scenarios, such as pandemics or natural disasters. Moreover, managing health worker and patients' credentials across different organizations and countries adds complexity, resulting in wasted time and resources, ultimately hindering rapid response efforts.

Innovation or Practice Description (200–300 words):

Turing Certs offers a digital, blockchain-based credentialing solution that transforms the way healthcare professionals' qualifications and medical records are issued and verified. Using verifiable credentials (VC) and decentralized identifiers (DID), the platform enables instant, secure, and tamper-proof verification of medical training, certifications, and patient records.

In partnership with Tungs' Taichung MetroHarbor Hospital, Turing Certs has digitized medical training certifications, health examination report, and nursing credentials, providing hospital administrators and patients with a faster, more reliable verification

process for healthcare professionals. By transitioning from paper-based records to digital health credentials, Tung's Hospital has reduced administrative overhead, improved trust in the medical staff, and streamlined credentialing processes. This solution also ensures compliance with global privacy standards such as GDPR and integrates seamlessly with the hospital's existing systems.

Similarly, Turing Certs' work with Taiwan Society of Emergency Medicine (TSEM) focused on creating a secure and verifiable digital platform for tracking domestic and foreign medical training and study certificates, medical-related personnel qualification certificate, and certificate of Advanced Cardiac Life Support (ACLS). By using blockchain to verify the integrity of healthcare documentation, Turing Certs ensures that patient data and medical certifications are secure, accessible, and immutable, creating a more transparent, efficient, and trustworthy healthcare environment.

Results and Evidence of Impact (150–250 words):

- Tung Hospital successfully digitized medical staff certifications, reducing credential verification time by 80% and improving operational efficiency.
- Turing Certs has partnered with over 500 institutions globally, protecting millions of e-credentials across sectors like healthcare, education, and government.
- Paperless certification systems have reduced costs associated with paper, printing, and manual recordkeeping, supporting environmental sustainability and cost-efficiency in healthcare, reducing costs by two-thirds.
- Contribution to environmental sustainability by eliminating the need for paper-based certificates, supporting global SDGs.
- In collaboration with **WHO's PMNCH**, Turing Certs has already certified over **12,000 international volunteers** in 150 countries, enabling real-time, cross-border credential verification for humanitarian health projects.
- Real-time updates on certificates, allowing organizations to track health professional credentials more effectively.
- Enhanced data security and integrity, with patient records and staff qualifications securely stored and easily verified.

Scalability & Sustainability (100–150 words):

Turing Certs' platform is built on open standards and public blockchain, making it highly scalable and interoperable across various healthcare systems and institutions worldwide. The system integrates with existing healthcare infrastructure, providing a seamless transition from paper-based to digital credentialing. By adopting global standards such as W3C VC and OpenID4VC, the system facilitates cross-border recognition of healthcare qualifications, supporting women's, children's, and adolescents' health programs internationally. The blockchain foundation ensures data integrity and security, which is crucial for maintaining privacy in sensitive healthcare records. The growing adoption of Turing Certs by hospitals, clinics, and governments demonstrates its sustainability, providing a cost-effective, secure, and environmentally friendly solution for managing digital health credentials.

Lessons Learned or Key Insights:

- Digital health credentials provide faster, more reliable verification and improve operational efficiency in healthcare institutions.
- Blockchain technology ensures the integrity and security of health records and certifications, building trust across all stakeholders.
- The successful implementation at Tung's Hospital and TSEM underscores the scalability and benefits of transitioning to a paperless, verifiable health credentialing system.
- By embracing global standards (such as W3C VC and OpenID4VC), Turing Certs ensures cross-border interoperability, facilitating future international adoption, especially in urgent healthcare scenarios, such as pandemics or natural disasters.