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The MetroHealth System
HB 177 - Proponent Testimony
Senate Financial Institutions and Technology Committee
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Chairman Wilson, Vice Chair Hottinger, Ranking Member Maharath and members of the Senate Financial Institutions and Technology Committee, my name is Dr. Akram Boutros and I serve as the President & CEO of The MetroHealth System. Thank you for the opportunity to offer testimony in support of House Bill 177. I would like to thank the sponsors of this bill, Representatives Mark Frazer and Rick Carfagna, for bringing this important legislation forward.

As the President and CEO of The MetroHealth System, I see firsthand how important it is to be able to utilize blockchain technology to best serve our patients. Our more than 7.800 employees deliver care at MetroHealth's four hospitals, four emergency departments and more than 20 health centers and 40 additional sites throughout Northeast Ohio. In the past year, MetroHealth has served 300,000 patients at more than 1.4 million visits in its hospitals and health centers; 75 percent of those patients are uninsured or covered by Medicare or Medicaid. We are the safety-net health system for the most vulnerable members of our community.

Blockchain and Distributed Ledger Technology (DLT) have great potential across health care to improve patient care and reduce costs. The five basic principles of blockchain are:

1. Distributed Data Base or ledger;

2. Peer to Peer transmission between nodes;

3. Transparency;

4. Irreversibility of records;

5. Computational logic.

Development of these technologies has already started to take hold in health care networks, from clearinghouses to drug supply chains to provider-credentialing and other critical areas. Blockchain offers a decentralized, or a distributed solution, rather than a centrally controlled solution.

The health care industry is very similar to other industries where cyberattacks have heightened the level of requirements for securing data. There is a continual need for enhancing cyber security. Blockchain by its nature of design provides a solution for securing data through digital signatures and advanced cryptography. It also poses a very difficult challenge to cyber attackers because the data rests on multiple ledgers or nodes on the blockchain network. A cyberattack on a single node within a blockchain would be rendered useless, because all other nodes would identify any changes or alterations.

The MetroHealth System believes that blockchain technology holds incredible potential for physician credentialing and birth and death certificates. Regarding physician credentialing, MetroHealth and other major health care systems within the Cleveland area have been reviewing a blockchain solution with an outside third-party developer organization. The goal is to assist in further design of a blockchain solution that has the

potential to accelerate the process of physician and allied health credentialing and reduce the problem of delays. The health care industry today is plagued with delays in the physician credentialing process. Estimates range anywhere from 120 to 180 days to complete the credentialing process. The primary goal is to partner with a third-party developer utilizing Hashed Health Hyperledger for storing and cryptographically signing credentials on the blockchain to ensure members of the network can access and trust the validity of provider credentials.

The MetroHealth System is one of the several organizations participating under the label of "Project Symphony" to bring harmony, proficiency, and supporting standards and technology to the practitioner credentialing process and bring about industry impacting improvement. One of the group's objectives is to recommend prospective supporting technologies for practitioner credentialing. The group recommends the use of blockchain and verifiable credentials, digital certificates, and digital signatures (including Public Key Infrastructure). Other participants in Project Symphony include:

- American Board of Medical Specialties (ABMS)

- American Council for Graduate Medical Education (ACGME)

- American Hospital Association (AHA)

- American Medical Association – Organized Medical Staff Section (AMA-OMSS)

- Federation of State Medical Boards (FSMB)

- Hyland Credentials

- National Association of Medical Staff Services (NAMSS).

A digital birth and death certificate blockchain application has the potential to lower costs for consumers, health care organizations, and the State of Ohio. It will provide nearly costless verification and distribution. Today this process involves a costly settlement and reconciliation process of paper, manual data entry, and validation. MetroHealth has reviewed alternatives that utilize blockchain technology to digitize the process of creating, storing, and eventually distributing these documents. This would provide a digitized solution for the in-hospital birth and death certificates. The security of sharing of these documents would require proper authorization via digital key.

I would again like to thank Representatives Frazier and Carfagna for offering this Bill. As I have discussed, this technology will be an important innovation to health care systems as they continue to strive for improved patient care and efficiencies. The MetroHealth System looks forward to utilizing blockchain to improve patient care and bring down the costs of health care.

Mr. Chairman, thank you for allowing me to testify today. I urge full support of HB 177. Thank you.