MetroHealth

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HB 177 -Proponent Testimony
House Technology and Innovation Committee
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Chairwoman Frazier, Vice Chair Hall, Ranking Member Lightbody and members of the House Commerce and Labor Committee, my name is Dr. Akram Boutros and I serve as the President & CEO of The MetroHealth System. Thank you for the opportunity to present testimony before you today 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. We are one of the largest and most comprehensive healthcare systems in Northeast Ohio. The system has a staff of over 7,800 that provides 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 whom 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 healthcare 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, and;

5. Computational Logic.

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

The healthcare industry is very similar to other industries where cyberattacks have heightened the level of requirements for securing patient 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 provides cyber

attackers a very difficult challenge 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, The MetroHealth System along with the other major healthcare 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 healthcare industry today is plagued with delays in the physician credentialing process. Estimates range anywhere from 120 to 180 days to complete the credentialing process. MetroHealth has partnered in a pilot program with a third-party developer utilizing Hyperledger and digital wallet for storing and cryptographically signing credentials on the blockchain to ensure members of the blockchain network have access and can trust the validity of the provider credentials.

A digital birth and death certificate blockchain application has the potential for less cost to consumers, healthcare organizations, and the State of Ohio. It will provide nearly costless verification and distribution. Today this process is a costly settlement and reconciliation process of paper, manual data entry, and validation. MetroHealth has been reviewing an alternative that utilizes blockchain technology to digitize the process of creating, storing, and eventual distribution of these documents. If successful, this pilot project will 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 healthcare systems as they continue to strive for improved patient care and efficiencies in the future. The MetroHealth System looks forward to utilizing blockchain to improve patient care and bring down the costs of healthcare.

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