Governor Abbott, Lt. Governor Patrick, Speaker Phelan, and Legislative Committees:

The Texas Health Services Authority (“the Authority”) submits this annual report pursuant to provisions within its enabling statute, Chapter 182, Health & Safety Code. This report includes not only a progress update on THSA’s efforts to carry out its mission, but also provides a detailed account of the Authority’s ongoing efforts to develop a transformative vision for healthcare interoperability in the State of Texas.

We appreciate the state’s leadership in creating the Authority to promote, implement, and facilitate the voluntary and secure electronic exchange of health information in the State of Texas. It is our sincere hope that the issues identified in this annual report will serve to improve the health of all Texans.

Respectfully submitted,

Shannon Calhoun
Chair

George R. Gooch
CEO
Executive Summary

The Texas Health Services Authority (“the Authority”), established by the Texas Legislature in 2007, has developed statewide health information exchange (HIE) infrastructure in Texas over the past 16 years. Through partnership with the Texas Health and Human Services Commission (HHSC), local HIEs, Medicaid Managed Care Organizations (MCOs), hospitals, health care providers and other state agencies, the Authority continues to improve the lives of all Texans. Through the development of an HIE infrastructure connecting providers, hospitals, MCOs, and state agencies, all participants in the continuum of care continue to receive greater access to important health data to support the health care system in the state and improve patient safety and quality of care.

Through the HIETexas Emergency Department Encounter Notification (EDEN) system, the Authority continues to notify providers, hospitals, and MCOs in real time when their patients have an encounter at hospitals across Texas. EDEN receives and publishes alerts for patient admissions, intra-facility transfers, and discharges in the state of Texas. These alerts may include the hospital event type (i.e., admit, discharge, transfer), as well as additional information, such as updated patient demographics and recent prior admissions.

The Authority continues operations of the HIETexas Patient Unified Look-up System for Emergencies (PULSE) through partnership with Texas Medicaid and the Texas Department of State Health Services (DSHS). PULSE allows disaster response healthcare professionals to query and view patient documents from all connected healthcare organizations. During disasters, HIETexas PULSE serves as a health information exchange platform for alternate care sites, which typically have little or no access to electronic health information. It is essential that the most clinically relevant information be available to support individuals displaced by disasters. The access and use of electronic health information is critical to patient quality of care during these times of crisis.
Introduction and Background

The Texas Health Services Authority (“the Authority”), as further described in Chapter 182 of the Texas Health & Safety Code, was created by the Texas Legislature in 2007 to promote, implement, and facilitate the voluntary and secure electronic exchange of health information in Texas.\(^1\) A 14-member Board of Directors appointed by the Governor of Texas, with the advice and consent of the Texas Senate, governs the Authority.\(^2\)

In 2009, the U.S. Department of Health and Human Services announced the State Health Information Exchange (HIE) Cooperative Agreement Program, which was authorized under the Health Information Technology for Economic and Clinical Health (HITECH) Act, to fund state planning and implementation of electronic health information networks to support higher quality, safer, and more efficient health care. The program first required states to develop strategic and operational plans to guide the establishment and operation of electronic health information networks.

The Texas Health and Human Services Commission (HHSC) submitted an application to the Office of the National Coordinator for Health Information Technology (ONC) for funding under the State HIE Cooperative Agreement Program. Under the application, the Authority was identified as the state-level entity responsible for implementing HIE in Texas, as referenced in Chapter 182 of the Texas Health & Safety Code. Following approval of the application in 2010, HHSC formally partnered with the Authority to complete development of the State HIE Plan to address several key issues, including governance, finance, technical infrastructure, business operations, privacy, and cybersecurity.

In 2011, the Texas Legislature, via House Bill 300 (2011, 82R), directed the Authority to establish a process by which a “covered entity,” as defined by the Texas Medical Records Privacy Act, may apply for certification of their past compliance with state and federal privacy and security standards.\(^3\) Today this program is known as “SECURETexas: Health Information Privacy and Security Certification.”\(^4\)

As the State HIE Cooperative Agreement Program came to an end, Texas HHSC developed a Medicaid Implementation Advanced Planning Document (IAPD) to submit to The Centers for Medicare and Medicaid Services (CMS) to continue implementation of the State’s HIE Plan developed under the State’s HIE Cooperative Agreement Program. This program became known as the “HIE Connectivity Project.”

In May 2019, the Authority partnered with HHSC to provide HIE infrastructure for improved HIE connectivity, and an event notification system that supports care coordination use cases by providing a statewide platform to notify authorized healthcare entities of their patients’ arrival at an emergency department. In 2020, this was expanded to include the HIETexas Patient Unified Lookup System for Emergencies (PULSE).

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\(^1\) Section 182.051(1)(a), Health & Safety Code  
\(^2\) Section 182.053(a), Health & Safety Code  
\(^3\) www.THSA.org/privacy-security-certification/  
\(^4\) Id.
In 2021, funding under the HITECH Act came to an end, and Texas, among several other states, transitioned to funding under Medicaid Managed Information Systems (MMIS) for ongoing maintenance and operations for HIE. In order to maximize receipt of federal funds, the Authority, in partnership with Texas Medicaid, underwent the Medicaid Enterprise Systems (MES) outcomes-based certificate process in 2023, and is currently awaiting certification.

The Authority’s board of directors conducted four public hearings in 2023 to discuss the state of interoperability in Texas, and how HIETexas may continue to drive interoperability forward across the public and private sectors.
Governance of the Texas Health Services Authority

The governance structure of the Authority is designed to ensure effective oversight and decision-making in pursuit of the Authority’s purpose under Chapter 182, Texas Health and Safety Code. At the core of the Authority’s governance is the Board of Directors, comprising 12 voting members appointed by the Governor, with the advice and consent of the Senate, and represent diverse healthcare sectors such as consumers, clinical laboratories, health benefit plans, hospitals, regional health information exchange initiatives, pharmacies, physicians, and rural health providers. The Board is further enriched by the inclusion of two ex officio members representing health and human services agencies.

The collaboration between public and private representatives on the Board is vital for fostering a comprehensive understanding of the healthcare landscape. By bringing together diverse perspectives, the Authority ensures that its initiatives are not only aligned with public interests but also benefit from the innovative and strategic insights inherent in private sector expertise. This synergy strengthens the Authority’s ability to drive positive change, advancing the development of a seamless electronic health information infrastructure that ultimately enhances patient safety and quality of care for the greater good of all Texans.

In addition to board representation, the Authority also hosts an Interoperability Collaborative. The Interoperability Collaborative stands as a dynamic extension of the Authority’s governance structure, playing a pivotal role in advancing the intricacies of healthcare interoperability. Comprising private sector healthcare representatives, this collaborative serves as an invaluable forum for delving into nuanced use cases and addressing the complex challenges associated with seamless electronic health information exchange. Through this specialized initiative, the Authority harnesses the wealth of industry-specific insights and expertise to develop targeted solutions that serve to meet the needs of all Texans. The findings and recommendations generated by the Interoperability Collaborative serve as a detailed and informed resource, enriching the decision-making process of the Board and ensuring that the Authority’s strategies are finely tuned to the practical needs and realities of the healthcare ecosystem.
2023 Activities

The Texas Health Services Authority (“the Authority”) continues to build a statewide network that facilitates exchange among healthcare stakeholders statewide, called “HIETexas,” to ensure a patient’s health information follows them regardless of where they receive treatment or where the information is stored.

HIETexas enables secure electronic exchange of patient data in near real time, which improves health outcomes, saves lives and reduces costs. At the heart of HIETexas is a strong security framework that protects patient data and ensures that patient preferences and privacy are respected. Through partnership with HHSC, the Authority continues to build an HIE network that supports the health care system in Texas and improves patient safety and quality of care.

Continued Partnership with HHSC

The Center for Medicare and Medicaid Services (CMS) approved the Texas Medicaid Health Information Exchange (HIE) Advanced Planning Document (APD) for the next biennium. The most recent version of the APD provides support for three strategies:

Health Information Exchange Infrastructure

This strategy includes enhancing the state’s HIE infrastructure to support connectivity with the state’s Medicaid system and assisting entities in implementing connections to HIETexas. This funding will help alleviate a financial barrier to entities’ participation in the statewide network. Connections implemented under this strategy includes the delivery of data from local HIEs participating in the HIE Connectivity Project and seeking to forward this data to Medicaid and MCOs via HIETexas.

In 2023, the Authority continued to build upon core data query services that enable HIETexas to obtain data from query-based sources, including all activities and capabilities required to deliver C-CDA ToC Summaries and EDEN alerts.

Emergency Department Encounter Notifications (EDEN)

EDEN’s method of implementation and governance benefits the entire healthcare community. This strategy supports care coordination use cases by providing a statewide platform to notify authorized healthcare entities of their patients’ arrival at an emergency department (ED). These use cases will help Texas Medicaid reduce ED utilization and hospital readmissions by enabling better follow-up care. The electronic receipt of data from healthcare organizations and the publishing of alerts to Medicaid Managed Care Organizations (MCOs), Dental Maintenance Organizations (DMOs), Texas Medicaid and other authorized data recipients accomplishes this objective.
**Patient Unified Lookup System for Emergencies (PULSE)**

The Authority was originally created in response to the aftermath of Hurricane Katrina in 2006, when individuals receiving healthcare in shelters could not ascertain their medication histories to better inform care. Over a decade later, Hurricane Harvey reinforced the need for statewide HIE to support care for individuals displaced from their homes by allowing their health information to follow them wherever they go, including shelter locations.

End users of HIETexas PULSE utilize a tablet or laptop to securely obtain medical information for patients evacuated to temporary shelter locations such as a stadium, school or church. This allows authorized emergency services medical personnel, as well as authorized public health professionals, the ability to determine a patient’s medical history from connected organizations, providing current medications, allergies and recent laboratory results.

PULSE also includes a feature known as “Emergency Census,” which supports family reunification efforts during disasters. Through Emergency Census, PULSE end users can upload a panel of missing persons to search for an individual, automatically and continuously, against Census View. If a missing person is admitted to the hospital or ED, has been checked in or out of an alternate care facility that uses PULSE, or has been discharged from a facility that participates in EDEN, the Emergency Census user will be notified in real-time.

**EDEN Use Cases**

The Authority continued work on a developing EDEN use cases in 2023, including the EDEN Texas Homeless Network use case. Staff received feedback from THSA’s Interoperability Collaborative, as well as the board of directors.

**EDEN Texas Homeless Network use case**

Individuals experiencing homelessness can be discharged to a shelter with little notice, thus minimizing the shelter’s ability to assure appropriate support services. Managed Care Organizations (MCOs) have been working with the Texas Homeless Network (THN) to coordinate these transitions safely. MCOs are manually referring clients experiencing homelessness to local shelters. THN has established a process to streamline this coordination.

THSA is exploring automation of this process, using the EDEN network, to allow for proper care delivery to the homeless population; and improve outcomes, avoid unnecessary readmissions, and lower healthcare costs.

THSA is working with THN, Superior, and C3HIE to pilot this program. The program is in its early stages, and is expected to develop further in 2024.
Activities of the Authority’s Interoperability Collaborative

The Authority’s Interoperability Collaborative meets on a monthly basis, and delegates work to certain work groups in between meetings. The Collaborative routinely includes meetings of 90-100 stakeholders, while the work groups are smaller, and include stakeholders specializing in certain areas of interoperability. Below is an update on the achievements of each work group in 2023.

**C-CDA Standardization Work Group**

This work group’s efforts to standardize the C-CDA across electronic health record (EHR) platforms and healthcare organizations enhanced clinical information available to the clinician at all levels of health information exchange. The group efforts were in the addition to optional templates to increase clinical content and time constructs to illustrate an encounter while minimizing redundant information. The recommendation was carried forward and included on the Sequoia Project Data Usability Implementation Guide, and will be voted on by national standards bodies in January 2024 for inclusion as a requirement for certified EHRs. This not only assisted THSA’s PULSE program, which draws C-CDA documents from national HIE networks, but is enhancing transitions of care nationally.

**Direct Secure Messaging Work Group**

This work group identified organizations were meeting the minimum standards of CMS with the ADT notification requirements, and uncovered multiple important issues. The efforts of this work-group to increase adoption of the Direct Trust Event Notification Standard has led to improved data quality of the ADT messages being received by Data Recipients (PCPs, Care Managers, Payers, MCOs, Medicaid, etc.). The information includes full demographics, insurance, diagnosis, attending physicians and more. This effort improved the quality of the ADT messages being sent by HIETexas EDEN to network subscribers.

**21st Century Cures Act Work Group**

This work group developed a sample information-blocking policy and identified concerning behavior with information security and alerted the community to be aware. These efforts supported the Authority’s efforts to assure compliance with state and federal medical and privacy laws.

**Standardizing Newborn Screening and Reporting Work Group**

Once finalized, this work group’s efforts to standardize capture and reporting of newborn screening requirements for public health will enhance the clinical information available to the clinician at all levels of health information exchange, including but not limited to the Authority’s PULSE program.
Conclusion

The Texas Health Services Authority (“the Authority”) stands at the forefront of driving transformative change in healthcare interoperability through its commitment to advancing health information exchange (HIE) in the State of Texas. The Authority has diligently implemented and fostered an interoperable statewide HIE infrastructure, exemplified by its HIETexas EDEN and PULSE systems. In partnership with the Texas Health and Human Services Commission (HHSC), local HIEs, Medicaid Managed Care Organizations (MCOs), hospitals, health care providers and other state agencies, the Authority continues to accomplish its mission and purpose under Chapter 182, Health and Safety Code.

The Authority’s board of directors, staff, and the Interoperability Collaborative has played a pivotal role in shaping the healthcare interoperability landscape of Texas, ensuring that the Authority’s initiatives align with public interests and benefit from the innovative insights inherent in private sector expertise.

Looking ahead, the Authority remains dedicated to its mission, forging ahead with initiatives that not only meet the immediate needs of Texans, but also anticipate and address the evolving challenges in healthcare interoperability. Through ongoing collaboration, the Authority is poised to continue its leadership in shaping the future of health information exchange, ultimately contributing to a healthier and more resilient Texas.