North Carolina Department of Public Safety

Adult Correction and Juvenile Justice

Roy Cooper, Governor
Erik A. Hooks, Secretary

Reuben Young, Interim Chief Deputy Secretary

MEMORANDUM

TO: Chairs of the Joint Legislative Oversight Committee on Justice and Public Safety
Chairs of the Joint Legislative Oversight Committee on Health and Human Services

FROM: Erik A. Hooks, Secretary EAH
Reuben Young, Interim Chief Deputy Secretary RFY

RE: Inmate Health Information Exchange Study Report

DATE: February 1, 2018

Pursuant to Session Law 2017-57, SECTION 16C.11A., "The Department of Public Safety, in collaboration with the Department of Health and Human Services, shall study the feasibility of the State acquiring and implementing an inmate health information exchange program to allow for the secure and effective transfer of pertinent medical information on an inmate, including the ability to upload and transmit test results, so that the need for replication of tests is either minimized or eliminated. The Departments shall report their findings and recommendations, including any legislative proposals, to the Joint Legislative Committees on Justice and Public Safety and Health and Human Services by February 1, 2018."

Introduction

In recent years, correctional health care has experienced unprecedented challenges, demanding substantial and costly operational changes in the provision of inmate health care. Running parallel to that is the fact that most incarcerated individuals return to society, further underscoring the fact that correctional health care plays a vital role in improving both public safety and public health. This isn't a new concept – in fact, Richard Carmona, who served as U.S. Surgeon General from 2002 to 2006, stated that "public safety is public health; public health is public safety."

The North Carolina Department of Public Safety has experienced these changes in inmate health care, as well, and continues to seek the safest and most cost effective manner in which to provide quality health care for its inmates. One such effort includes the Department of Public Safety's recent development and implementation of an internal electronic health record (EHR) system, state-wide. This EHR is also capable of integrating with a viable state-wide health information exchange (HIE) system.

While the concept of "continuum of care" in criminal justice isn't new, it's relevance in terms of inmate health care has increased in prominence. This, in turn, has demanded expansion in the use of technology, including the aforementioned electronic health records and health information exchange systems in the correctional health care arena. This legislative mandate to review the feasibility of the State acquiring an inmate health information exchange system, therefore, is both timely and relevant.

Given the cost, scope and complexity of today's inmate health care system, its supporting technology must be robust, comprehensive, and broadly interoperable.

The findings contained in this report were developed collaboratively between the Department of Public Safety and the Department of Health and Human Services, and the recommendations represent those of both agencies.

Background/Context

To offer context to the consideration of the utilization of a health information system for inmates incarcerated in North Carolina prisons, the following excerpts from a study conducted by The Pew Charitable Trusts, entitled "Prison Health Care: Costs and Quality, How and why states strive for high performing systems," dated October 2017, are provided.

Pew's research states the following:

Departments of correction collectively spent $8.1 billion on prison health care services for incarcerated individuals in fiscal year 2015 – probably about a fifth of overall prison expenditures.

Prison health care sits at the intersection of pressing state priorities. From protecting public safety to fighting disease and promoting physical and behavioral health, and from fine-tuning budgets that trim waste to investing in cost-effective programming with long-term payoffs, the health care that prisons provide to incarcerated individuals and the care that prisons facilitate post-release is a critical linchpin with far-reaching implications.

Well-run, forward-thinking prison health care systems are vital to state aims of providing care to incarcerated individuals, protecting communities, strengthening public health, and spending money wisely. Likewise, poorly performing systems threaten to make states less safe, less healthy, and less fiscally prudent. Put simply: The stakes extend far beyond the confines of prison gates.

Prison Health Care is Integral to Achieving State Goals

- ✓ The last five decades have been transformational for prison health care.
- ✓ Dramatic advancements in the professionalization and sophistication of care provided generally brought care for prisoners into closer alignment and integration with health care provided in the community. Litigation largely drove these improvements. Incarcerated individuals and advocates began challenging substandard conditions, and courts responded by defining legal rights and establishing minimum standards and accountability.
- ✓ At the same time, correctional facilities increasingly became a setting in which individuals with serious health conditions - especially infectious diseases, substance use disorders, and mental illnesses - were diagnosed and treated. This was largely driven by the dual forces of the national war on drugs, which led to significant increases in the number of persons convicted for drug offenses, and the closing of mental hospitals as part of deinstitutionalization efforts.
- ✓ This deteriorating inmate health profile increased the demands on prison health care systems. But it also created [an] occasion for policymakers to incorporate these systems into statewide public health and public safety strategies because nearly all of those in prisons eventually return to their communities.

- ✓ The manner in which services are provided affects state budgets because of the expensive treatments for some common conditions, the downstream costs of delayed or inadequate care, and the legal and financial consequences of being found to violate inmates' constitutional rights to "reasonably adequate" care. *Moreover, with nearly all incarcerated individuals eventually returning to society, treatment and discharge planning—especially for those with a substance use disorder, mental illness, or infectious disease—play an important role in statewide anti-recidivism and public health efforts.*

Cost Considerations/Benefits

Typically, technological advancements are costly, but can generate substantial benefits, as well. Certainly in the realm of health care, including inmate health care, ways in which to improve quality of care while seeking cost efficiencies are critical in this time of drastically escalating health care costs. As such, duplication of services must be avoided in order to maintain cost efficiencies and the advancement of technology must be based on the development of a system that maximizes both efficiencies and benefits.

As indicated below, the State of North Carolina has invested in such a system - the NC Health Information Exchange Network. The following provides more information regarding this system.

NC Health Information Exchange Authority Background Information | NC HealthConnex

Health Information Exchange (HIE) systems have been in development nationwide since the American Recovery and Reinvestment Act in 2009 supported the use and exchange of electronic health information among health care providers.

In 2015, the General Assembly of North Carolina established a state-managed Health Information Exchange Authority (NC HIEA) to oversee and administer the N.C. Health Information Exchange Network (NCGS 90-414.7). The NC HIEA is housed within the N.C. Department of Information Technology's (DIT) Government Data Analytics Center (GDAC).

The NC HIEA operates North Carolina's state-designated health information exchange, NC HealthConnex, a secure, standardized electronic system in which providers can share important patient health information. The use of this system promotes the access, exchange and analysis of health information. The new law also requires that all health care providers that receive State funds (*e.g.*, Medicaid, State Health Plan) connect to NC HealthConnex by certain dates in 2018 and 2019 in order to continue to receive payments for services provided (NCGS 90-414.4). As amended during the 2017 legislative session, North Carolina Session Law 2017-57 requires the following relating to the participation of providers in the state-designated health information exchange, NC HealthConnex:

- Hospitals, as defined by G.S. 131E-176(3), physicians licensed to practice under Article 1 of Chapter 90 of the General Statutes, physician assistants as defined in 21 NCAC 32S .0201, and nurse practitioners as defined in 21 NCAC 36 .0801 who provide Medicaid services and who have an electronic health record system shall connect by June 1, 2018.
- All other providers of Medicaid and state-funded services shall connect by June 1, 2019.
- Prepaid Health Plans (PHPs), as defined in S.L. 2015-245, will be required to connect to the HIE. PHPs are also required to submit encounter and claims data.
- Local Management Entities/Managed Care Organizations (LMEs/MCOs) are required to submit encounter and claims data by June 1, 2020.

North Carolina's new, modernized health information exchange, NC HealthConnex, will add value to the health care conversations that are happening at all levels in the health care industry. It will break down information silos between health care providers, achieve greater health care outcomes for patients and create efficiencies in state-funded health care programs such as Medicaid. Many other states have been operating health information exchanges for years and are seeing success in improving patient care.

Governance

The NC HIEA has an 11-member Advisory Board, appointed by the General Assembly and made up of various IT and health care representatives that include the Secretary of Department Health and Human Services, Secretary of Department of Information Technology and the Government Data Analytics Center Director.

The NC HIEA recognizes the vital role that information technology has in the health care industry, specifically health information exchange. NC HIEA and its participants have a shared responsibility to protect our cyber resources and citizens' electronic health care records. The Authority has Privacy and Security policies that detail the procedures for security, HIPAA or eHealth Exchange breach in which any incident of unauthorized access to/acquisition of encrypted records or data containing personal information along with the confidential process occurs.

The NC HIEA takes its role as a steward of patient data very seriously and abides by the highest security standards as set by federal and state law. Additionally, the NC HIEA performs regular audits to ensure compliance, follows data specifications standards already set by the eHealth Exchange, and strives to minimize the amount of data shared to what is required to provide safe, quality and affordable care to patients.

Additionally, health care providers who sign up for NC HealthConnex sign a governing legal data use and sharing agreement based on the federal Data Use and Reciprocal Agreement (DURSA).

Funding

General fund appropriations for the NC HIE have been authorized by the North Carolina General Assembly as follows:

- $9 million, recurring; and
- an additional $3 million, non-recurring, for fiscal year 2017-2018 to support an upgrade of the HIE environment.

There are no fees to connect to NC HealthConnex charged by the State. Health care providers may be charged integration fees by their Electronic Health Record (EHR) vendor.

Features

Exchange Services - NC HealthConnex enables full participants to query via their EHR or via a web-based portal other participating health care providers that share a patient. Additionally, NC HealthConnex has established connectivity to the Georgia HIE (GaHIN) through the eHealth Exchange. Testing is underway with the U.S. Department of Veterans Affairs HIE (VHIE), and NC HealthConnex is actively planning to add connections to other neighboring states. This information, which is currently housed within provider organizations such as laboratory results, diagnostic studies and clinical documents, can be viewed via a web-based portal or within participants' EHR if a bidirectional connection has been established with that vendor.

Current data elements available in NC HealthConnex include:

- Allergies
- Encounters
- Immunizations
- Medications
- Problems
- Procedures
- Results

Messaging Services - Participants can easily send encrypted messages between other Health Information Service providers (HISP) through NC HealthConnex's direct secure messaging service. Through its partnership with Orion Health and DirectTrust, NC HealthConnex and its participants have access to a directory of more than 16,000 (and growing) secure messaging addresses.

Registry Services -The NC HIEA has developed a strong partnership with the North Carolina Division of Public Health (NCDPH) and is working alongside this agency to deliver public health registry reporting for full participants through the NC HealthConnex connection.

NCIR - Bi-directional routing of patient immunization information for participants through a common NC HealthConnex interface.

ELR - Electronic reporting from hospitals to the NC Division Public Health of laboratory reports which identify required reportable communicable diseases and conditions.

Diabetes - The NC HIEA is pleased to announce that effective June 1, 2018, the NC Diabetes Specialized Public Health Registry will be available for public health purposes. Eligible hospitals, eligible critical access hospitals, and eligible professionals who are full participants of NC HealthConnex are eligible to participate in the registry by signing the NC HealthConnex Diabetes Form.

Notification Services - Users with the highest level of access can receive notifications about significant patient events within the clinical portal once a patient/provider relationship is established. Additionally, NC HIEA is in testing with two pilot participants for clinical alerts delivered via EHR integration.

Data Quality - The NC HIEA is in the process of developing a robust data quality program.

Work Groups - Work Groups are an important component to the NC Health Information Exchange Authority's (NC HIEA) strategy to gather stakeholder input as NC HealthConnex works to help providers meet the State's requirements for connection as well as develop use cases to promote adoption and use of NC HealthConnex. The NC HIEA current work groups include the HIE Task Force, Specialized Registries, Behavioral Health, and Dental.

Milestones, to Date:

- Facilities Connected: 1,200 +
- Facilities in Onboarding: 400+
- Unique Patient Records: 4.25 million
- To date, all participants are sending all patient data, which is helping to build an infrastructure to support population health as well as public health registry initiatives. Additionally, the system has seen a 75% increase in the number of CCDs (Clinical Care Documents) exchanged per month during 2017.

Future State/Significant Benchmarks:

By June 1, 2020:

- Approximately 98% of North Carolina's health care providers will be connected to NC HealthConnex. This includes labs, pharmacy, behavioral health, transportation, etc.
- LME/MCOs as well as PHPs are required to connect and submit encounter claims data.
- NC HealthConnex is projected to have visibility into approximately 90% of citizens receiving treatment in North Carolina.
- NC HealthConnex will have access to data from other states through connections to national health care data networks.

Conclusions/Recommendations

1. The State of North Carolina already has a comprehensive, enterprise-level HIE in production - NC HealthConnex – for which substantial investments of state funds have been made.
2. The Department of Public Safety and Department of Health and Human Services believe the NC HealthConnex system represents a viable health information system which will allow for the secure and effective transfer of pertinent health information on inmates.
3. The Department of Public Safety and Department of Health and Human Services believe that a less comprehensive system, such as one which would, for example, only connect jails and prisons with detainee/inmate health information, is duplicative in nature and falls short of the current correctional health care demands.
4. The Department of Public Safety and Department of Health and Human Services recommend, therefore, that the Department of Public Safety work collaboratively with the Department of Health and Human Services and the Department of Information Technology's (DIT) Government Data Analytics Center (GDAC) to utilize the NC HealthConnex health information exchange system for the secure and effective transfer of pertinent health information on inmates.