# HIE Case Study: HIE for Public Health
Coastal Connect Health Information Exchange

Established in 2009 by hospital stakeholders, Coastal Connect Health Information Exchange (CCHIE) deployed its technology in 2011 as a way to connect unaffiliated ambulatory and acute healthcare providers throughout southeastern North Carolina. Once connected, these providers can securely share electronic patient information to support patient-centric care transition between providers, reduce redundant testing, and realize efficiencies in workflow. Having patient information available at the point of care through the HIE has realized improvement in both care management, care transition, and the overall patient experience.
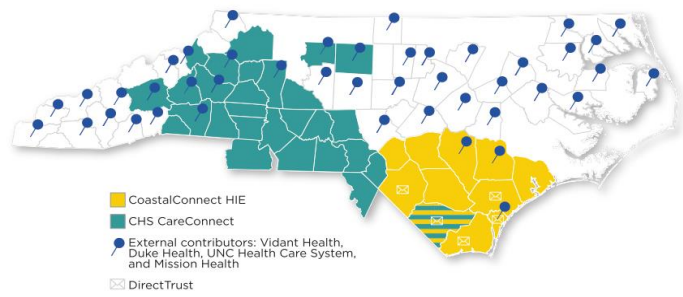
CCHIE's sustainability model is supported by its founding stakeholders as well as ambulatory provider participation fees. The Community Health Record (patient search tool) provided by CCHIE allows participants access to more than 110 data contributors (both acute and ambulatory) in 71 counties and includes information such as lab results, pathology results, radiology results, transcription reports (such as discharge summaries), encounter information, CCDs and demographics. Other HIE tools include order-results, results delivery, and alerting for hospital admission and discharge encounters. CCHIE recently established a data mart and will use this for providing population health analytic services to stakeholder hospitals and physician practices. CCHIE is a participant of [eHealth Exchange](#) and completed three connections through this platform with [Duke Health](#), [Vidant Health](#) and [UNC Health Care](#). CCHIE has also made connection to two HIEs: [Carolinas Healthcare System's CareConnect](#) and [Mission Health](#).

CCHIE is governed by a multidisciplinary board of representatives from stakeholder hospitals, community practices, the state Medicaid management entity, and a community representative. CCHIE has over 6.7 million indexed patients on the Patient Search tool with more than 600 unique users logging on each month to access over 7,500 unique patients in support of care transition across our footprint.

Anne Marie Robertson, MPA, Director of Operations, Coastal Connect HIE, was interviewed on the topic of leveraging HIE connection capabilities with the purpose of supporting care transition for public health populations.

What is/was the scope of work for your public health initiative? Was there a specific patient population targeted?

The scope of work identified for this public health project was to support care transitions for maternity patients who receive their prenatal and follow-up care at a health department in a different county from where the baby is delivered. Currently, the [Pender County Health Department](#) faxes patient records to the hospital ([New Hanover Regional Medical Center](#)) when the patient reaches the 38th week of their pregnancy. However, this workflow does not allow the hospital to access health department care documents for deliveries that occur prior to 38 weeks. CCHIE was asked by the health department to complete a bi-directional integration to allow real time access to health department data by hospital delivery staff, as well as provide delivery of hospital care documents back to the health department following delivery.

This integration has been completed with the health department's EHR vendor, [CureMD,](#) which delivers provider notes to the HIE as the CCD produced by the vendor did not provide all the necessary data elements for hospital clinicians to support delivering mothers. These provider notes include a visit note, new maternity note, family planning, newest physical, routine OB, new OB, OB problems and the maternal flowsheet.

The project go live in May 2017 was recognized as a "big win" for the hospital's Labor and Delivery administration. It was determined that hospital neonatologists would also gain value from HIE access to support the services the hospital provides to other neighboring counties. Labor and Delivery administration also discussed the possibility for another county health department to complete this integration and allow all providers that deliver at the hospital to follow the same pre-delivery process.

What is the targeted ROI (value)?

The targeted value is real-time access to data by hospital labor and delivery staff for this high-risk population, supporting a better experience for both the mother and the newborn. The hospital has confirmed that ROI will be realized in decreased use in resources managing incoming faxes, indexing patients in the hospital EHR, and shredding faxes on a Monday when a patient did not deliver. Two other benefits to the hospital were also a decrease in chart duplication created during the weekly indexing of patients and streamlined electronic care transition, which can be duplicated

with other health departments within the region.

What is the biggest challenge that your organization faced when implementing the use of HIE for public health capabilities? What are lessons learned from the technical integrations completed to support this scope of work?

With all integrations, ensuring impacted staff are trained on the HIE application to support utilization and adoption is key. Training of the hospital OB staff was completed though continued follow up will be necessary for increased utilization and adoption. A key component of the training included increasing their comfort level with where to find the health department documents within the longitudinal patient record, Patient Search tool.

One of the biggest challenges faced for this scope of work was identifying the data sets needed to be pushed to the HIE from the health department to bring value to hospital OB staff in caring for the patient and working with the EHR vendor to include them in the provider notes.

Where did the resources come from to pursue these public health activities?

In addition to our founding provider stakeholders providing for CCHIE's sustainability, CCHIE has received grants to fund many of the EHR integration one-time fees.

Acknowledgements

2016-2017 HIMSS HIE Case Studies Task Force

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