



# Community Health Access Network

By implementing a fully integrated electronic health record (EHR), Centricity EMR, CHAN has reduced cost, increased access, and enhanced the quality of care delivered to its patient populations.

Established in 1995, Community Health Access Network (CHAN) is a Health Center Controlled Network (HCCN), integrating services for its eight community health center members who provide primary care services to uninsured, underinsured, and Medicare populations. CHAN also supports three Healthcare for the Homeless programs. CHAN's primary mission is to enable member CHCs to develop the programs and resources needed to ensure access to efficient, effective quality health care for these vulnerable patients.

A pioneer in electronic health record (EHR) implementation, CHAN was the first Health Center Controlled Network (HCCN) in the country to successfully implement a network-wide EMR. CHAN's systems include a fully interoperable EHR, GE's Centricity®, which supports 139 providers and provides links to member reference labs and four hospitals. The EHR is linked to the Centricity Practice Management system and shares a common reporting tool. Providers can securely access the system remotely to support offsite care.



## Solution overview

### Company profile

Community Health Access Network (CHAN) is a Health Center Controlled Network (HCCN), integrating services for its eight member community health center (CHCs) members who provide primary care services to uninsured, underinsured, and Medicare populations.

### The opportunity

Expand medical care capacity in the state of New Hampshire and extend business hours to better accommodate patient access.

### The solution

CHAN implemented GE's Centricity EMR across all of its ten CHC and three Healthcare for the Homeless sites.

#### Key benefits

- Reduced cost by maximizing throughput, saving time, optimizing assets, and reducing overhead
- Increased access by expanding services and extending coverage hours
- Enhanced the ability to deliver quality patient care through the development of patient indicators and target benchmarks based on best practices

## Why EHR

CHAN's original vision for implementing an EHR was to support the expansion of medical care capacity in the state of New Hampshire and extend business hours to accommodate patient access beyond the typical 9 to 5 model.

In addition to increasing access, CHAN also projected that an EHR could help their clinics reduce cost, for example, by eliminating many of the resources needed to maintain a paper chart and reducing the cost of a chart audit.

By providing timely access to more complete information, CHAN believed an EHR would also help them enhance quality and enhance clinical performance improvement. CHAN also anticipated that faster turnaround of clinical information and feedback – for example, lab results – would aid clinical staff in patient follow up and reduce patient stress.

## EHR selection and implementation

Selecting an EHR system that offered flexible workflow design was critical to the success of the project. CHAN's selection committee did a thorough review of available solutions, looking for a system that would be customizable to each site's unique needs, while supporting structured collection of discrete data to support clinical decision making and for clinical quality improvement measures. GE's Centricity EMR meets these criteria.

CHAN's first Centricity EMR implementation was completed in 2000. The EHR was completely operational across all CHAN CHC sites by 2004, with 100 percent system usage by staff at all levels.

## How the EHR works

Centricity EMR helps CHAN provide clear, legible records that can be rapidly accessed by all members of the care team and shared in a timely fashion, minimizing disruption of care and medication errors.

An important component of the EHR system is built-in clinical decision-making support, which provides caregivers with up-to-date best practices and evidence-based guidelines based on current medical research. Protocols work behind the scenes, triggering pop-up alerts regarding services due, drug interactions, and allergy checking as necessary.

CHAN has the flexibility to develop customized screens that further increase efficient workflows and thorough patient examinations. Individual sites have the freedom to add forms to support specific programs that are not common to all sites. Data captured in both custom screens and standard screens are stored in discrete data fields in the database which is used by CHAN for site specific and system wide reporting.

## Results

In recognition for its efforts to enhance patient care through the use of health information technology, CHAN was awarded the 2008 Nicholas E. Davies Award of Excellence for Community Health Organizations by the Healthcare Information and Management Systems Society (HIMSS).

Through the use of Centricity EMR, CHAN has demonstrated its ability to increase access, reduce costs, and enhance quality.

## Reduced cost

By implementing an EHR, CHAN has increased efficiency and reduced costs by maximizing throughput, saving time, optimizing assets, and reducing the overhead associated with the management of paper records.

- CHAN's health centers have been experiencing reduced patient visit throughput times which they attribute to easier access to information about scheduling, patient arrival, visit documentation, followup, billing and collections.
- Centers that have used the EHR for over five years have dramatically reduced the space needed for medical records by 90 percent - space which can be reallocated for patient care.
- Transcription costs have been virtually eliminated, saving an average of \$1 per medical visit, an annualized savings of approximately \$144,000. EHR implementation has also helped reduce photocopying costs.

CHAN has realized additional cost savings as the EHR infrastructure has matured, with continuous enhancements made to encounter forms which has made the provider workflow more efficient. A focused effort to minimize duplication, expand selections, and develop custom order sets within the EMR has resulted in

- provider time savings of 2-3 minutes per pediatric physical exam visit. At 46,805 annual pediatric physical exam visits this past year, this approximates a provider time savings of 1,560 annual hours.
- provider time savings of approximately 1 minute per diabetic visit, resulting in annual savings of 105 provider hours.

In addition, CHAN is in the process of implementing electronic prescribing and Health Information Exchange capabilities, which they anticipate will reduce the potential for adverse drug interactions and cut the number of duplicate tests and labs ordered. Additionally, this can help their providers prepare to take advantage of ARRA HITECH incentives for EMR adoption.

## Increased access

Adopting the EHR has helped CHAN achieve its goal of expanding medical care capacity in the state of New Hampshire:

- Since implementation, member CHCs, who were only categorical programs at the network's inception, have become full primary care centers offering the full spectrum of services.
- The Secure Portal and Secure Messaging capabilities of the EMR have helped CHC members to achieve their goal of extending coverage beyond 9 to 5, offering 24/7 coverage to their communities. CHAN providers, Hospitalists, pre-op teams and ER doctors have secure, remote access to electronic patient charts in the EMR any time of the day or night.
- EHR has also helped enhance access in the event of an emergency. In recent years, New Hampshire experienced the two worst floods in the last 100 years. CHAN's ability to divert care to unaffected centers was due in part to the ease of access to medical records, which would not have been possible with paper records. With the help of EHR, over 80 percent of scheduled patient visits were maintained throughout the emergency.

## Enhanced quality

CHAN has devoted much of its effort to clinical best practices and using data for performance improvement. With an EHR system in place, CHC members have been able to jointly develop patient indicators, target benchmarks for patient outcomes based on best practices, and monitor their adherence to those benchmarks.

Dashboard reports allow for site specific as well as network-wide analysis of patient care, promoting best practices. Improved reporting capabilities enable more prompt, clinician-specific feedback, allowing managers to target interventions in a more focused way to achieve better compliance with recommended guidelines.

"Due to its flexibility, the GE Centricity EMR has been one of the smartest IT and Clinical investments CHAN has ever made. Our CHC and Healthcare for the Homeless program members continue to appreciate the solution benefits more than ten years after our initial purchase, and we are confident we will meet the meaningful use criteria coming from CMS."

– Kirsten Platte, Executive Director  
Community Health Access Network (CHAN)  
Newmarket, NH

"Centricity is most helpful in allowing communication between all members of the clinical team as well as allowing everyone immediate access to patient records"

– Robert Slocum, M.D., Medical Director  
Families First Health and Support Center  
Portsmouth, NH

By consistently measuring the care they provide and sharing results, the CHAN CHCs have improved patient care and outcomes for large patient populations in New Hampshire:

- The EHR system has helped CHAN improve outcomes for diabetes patients. Since CHAN began using the EHR to track clinical outcomes for 12 indicators related to diabetes patient care and compliance in 2003, these indicators have significantly improved (see Figure 1).
- The EHR has also helped CHAN enhance the quality of care of pediatric patients. Data collected by clinicians during well-child encounters have helped support a state initiative to prevent childhood obesity. And using EHR data, goals for immunizations are benchmarked against national standards and reminder lists are developed to ensure that children's immunizations are scheduled in a timely manner.

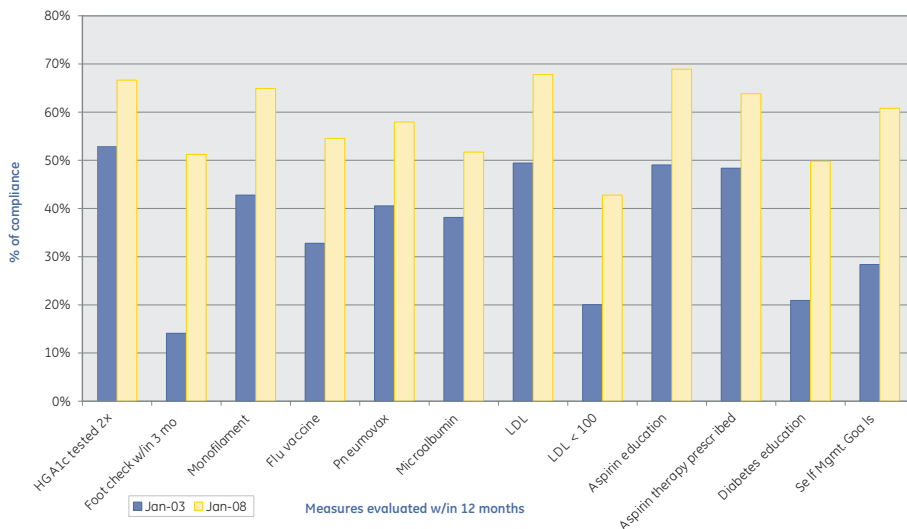
Because of Centricity EMR's ability to capture and trend CHC data for specific patient populations, CHAN has worked with various agencies in the state of New Hampshire on quality improvement initiatives:

- The New Hampshire Department of Health and Human Services has contracted with CHAN since 2003 to administer its Diabetes Education Program, in coordination with the two Area Health Education Centers in the state.

- CHAN was awarded funding from the Endowment for Health to improve the oral health of the people of New Hampshire.

Other examples of how the EHR has helped enhance the quality of patient care in the communities CHAN serves and beyond include:

- Accurate and up-to-date medication and problem lists that help ensure the dosage safety of high-risk COUMADIN® patients.
- Improved prenatal care management by tracking EHR data on trimester entry to care, birth weight, and other risk factors.
- Improved asthma care management using nine indicators, which are tracked and reported using the EHR.
- Tracking the upsurge in communicable disease using EHR data to identify affected patients and contact relevant state officials.
- Increasing care coordination across the continuum of care by reducing duplication of services, for example, by sharing records with ER staff in real time.
- Working closely with the state of New Hampshire on the statewide Health Information Exchange project by exchanging data from member CHCs with other practices in the state.



**Figure 1.**  
CHAN network percent comparison of diabetes compliance.

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