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## North Coast Health Information Network - Taking Humboldt's Health Into the 21st Century

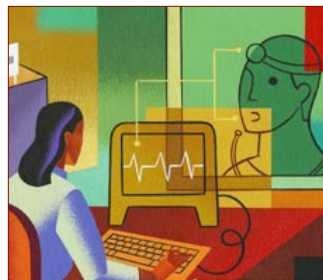
by Melissa Jones, JD, Health Policy Analyst

Humboldt County is on the forefront of the medical technology trend that is transpiring across the nation. Not only have larger practices in the county begun to adopt electronic medical records (EMRs), but Humboldt is one of the few counties in the state to have an operational health information exchange (HIE). Called the North Coast Health Information Network (NCHIN), this HIE is an electronic hub that helps transfer patient information between their medical providers. NCHIN is in its beginning stages and has already made steps towards achieving a more efficient medical system. This Policy Conversation will explore the privacy framework related to electronic record-keeping, explain the context for EMRs

and provide an update on how NCHIN is helping Humboldt County.

### Why it Matters: Improvements for Providers and Patients

Providers will not have to adopt costly fixes to help their EMR platform communicate with other providers and labs, and NCHIN will help them meet Meaningful Use Criteria as they are implemented (as discussed later in this piece). Patient information will be quickly received and integrated into their medical records, which will make it easier to provide appropriate, high quality care. Providers will also be able to better spot patient health trends over time, which could improve the quality of care and patient experience.



*“When a patient is in our Emergency Room one of the most critical pieces of information we need is the list of medications the patient is taking. Sometimes relying on the patient or family members is not the most accurate method. When EMRs become a reality this type of information can be shared. The ability for healthcare providers to share patient information back and forth real time, is one of the many long term goals of NCHIN.”* **Steve Engle, Chief Operating Officer of Mad River Community Hospital**

*“My [provider] practice’s use of the electronic medical record freed up the patient-practitioner relationship during an appointment. Rather than thumbing through a thick chart, looking at my medical record with my provider facilitates the appointments in an effective and efficient way. I believe the use of electronic medical records has led to higher quality, value-driven visits with my provider.”* **Randy Robertson, McKinleyville CA.**

Patients will find that NCHIN may help make their medical visits more efficient. For example, the wait time for finding out about test results will be reduced, referrals to specialists will occur more quickly, tests will not be needlessly repeated and basic medical information will be quickly relayed to specialists because they will already have it as part of the referral process.

### Privacy & Protections Framework

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) provides the baseline protections for medical privacy. It specifies that patient information can only be exchanged for treatment and care coordination. It also limits who medical providers can share information with and places restrictions on certain types of personal information, such as mental health records. Importantly, patients have a right to request and correct their records.<sup>1</sup> These rules have been applied to electronic records as well.

The Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH) is part of the American Recovery and Reinvestment Act of 2009. Part of HITECH updates HIPAA to better address the trend toward electronic health information technology. It increases the entities that HIPAA applies to and provides expanded protections and enforcement.

There are a variety of laws in California that address patient privacy. There are special protections for certain kinds of information related to specific diseases such as AIDS, HIV, Hepatitis B or C and for certain populations such as minors and the developmentally disabled.<sup>2</sup>

Risks are inherent in EMRs. Hacking, computer glitches and misuse of personal information are seri-

### Key Terms & Definitions

**EMR (Electronic Medical Record):** an electronic version of a patient medical record.

**HIE (Health Information Exchange):** the movement of electronic medical records, lab results, and other documents between providers and computer systems.

**HIPAA (Health Insurance Portability & Accountability Act):** sets the baselines for medical privacy laws and patient protections.

**HITECH (The Health Information Technology for Economic and Clinical Health Act):** updates medical privacy policies and promotes adoption of electronic medical records.

**Meaningful Use Criteria:** set of new requirements and goals regarding electronic medical records for providers to meet by 2015. Before 2015, financial incentives are tied to requirements. After 2015, financial penalties may be imposed if requirements are not met.

**NCHIN (North Coast Health Information Network):** a non-profit organization dedicated to building an electronic information infrastructure for Humboldt County's medical community.<sup>3</sup>

**Providers:** Doctors, nurses, healthcare workers, hospitals and clinics.

ous concerns, especially for information as personal and intimate as health records. Providers are required to comply strictly with privacy regulations that address these concerns. It is unlikely that breaches will occur, and are largely outweighed by the definite benefits of EMR adoption. NCHIN is fully updated on the developing privacy laws for electronic medical records and has processes in place to protect patient privacy and

*"When the introduction to electronic medical records was presented, I was concerned, at first, about the public access to records held or initiated by my provider. When I mentioned this to my providers, they assured me that the records would remain confidential, and not be disclosed to third parties without my permission.*

*When the Patient Portal was unveiled, I realized that the records were very helpful to me, giving me access to my health information as it became available, 24 hours a day. I became more comfortable with the idea as I became more familiar with the system. I have used the portal to access my test results, make appointments, view that my mammograms and other tests were correctly reported to the providers, etc. I think the system is invaluable.*

*I also wish, however, that the IPA [Independent Practice Association] or some other entity could ensure that everyone is using the same system so the info would be available county-wide."*

**Janina Shayne, Arcata CA**

information. NCHIN maintains a Policy Manual and Standards which is updated annually to reflect current laws and regulations affecting the health information landscape.

### The Importance of Meaningful Use

The concept of “Meaningful Use” is relatively new, but cannot be overlooked when discussing EMRs. HITECH established guidelines to promote adoption of electronic health records. Called Meaningful Use Criteria, these guidelines created financial incentives for providers who meet specified goals. Meaningful Use guidelines have three stages, and providers who meet each stage can qualify for financial incentives.

Locally, the county can bring in over 10 million dollars over five years if providers can meet Meaningful Use guidelines. After 2015, a penalty is issued to providers do not meet each stage of Meaningful Use.<sup>4</sup>

This presents challenges for rural and smaller practices, which may struggle to afford EMRs and utilize them in the ways necessary to meet all requirements of Meaningful Use. This means that some local practices may be penalized when the guidelines are not met.

### What is NCHIN and How Does it Work?

NCHIN will help Humboldt County address its Meaningful Use Criteria described above. NCHIN is an HIE that facilitates the electronic sharing of medical records for treatment and diagnosis purposes. An HIE is an entity that facilitates the transfer of medical information among providers, and transfer is a requirement in the Meaningful Use guidelines.

Imagine two people, trying to communicate with one another in different languages without either person fully understanding what the other is saying. This is what the current system is like - most of the providers and hospitals are using different EMR platforms that may not be able to share information. NCHIN is a hub that can route medical information from labs

and hospitals to providers, acting as a “translator” so the different platforms can work together effortlessly.

Currently, medical records, lab results, and referrals are exchanged through fax, by phone or by mail. They must be retrieved and routed to the patient file, electronic or paper. Patient records can be lost, mislaid or misfiled at any point in this process. NCHIN can improve the transfer process by sending this information directly to a patient’s established EMR at their provider’s office with a fraction of the time, amount of work and risk of error.

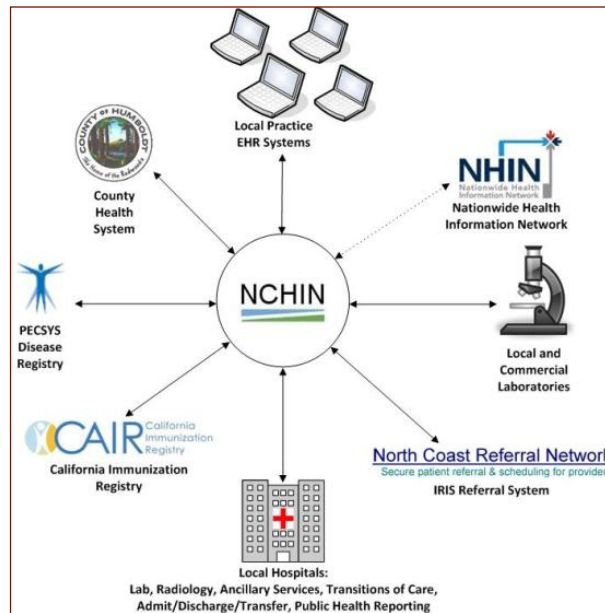
NCHIN does not allow third parties (someone other than the referring provider) access to patient records at this time.

This process is called a “query” and determines what federal guidelines apply. NCHIN will likely have query features in the future, and give patients an opportunity to opt-in or opt-out of the system at that time.

One example of a query that would help emergency departments address patient needs would be by making a patient’s medical records available during emergencies. This is especially important when a patient may not be able to convey a full medical history to emergency personnel. It will also help primary care providers receive records of emergency care visits so follow up visits can be more effective.

NCHIN also has plans to build upon the established electronic referral system, IRIS, and provide specialists with necessary background information to accompany referrals in an accurate and efficient transfer. Patients would no longer have to repeat basic demographic information or known medical history to a new provider.

At a later date, NCHIN will provide patient access to records to help patients track their own medical information and improve personal recordkeeping. Currently, patients may be able to access pieces of their records from individual providers, but have yet to get their full and complete record in one location. By creating a one stop source for all medi-



cal records, patients may become more informed and better advocates for their medical care. This could also apply in the case of caregivers, where the patient has given permission for the caregiver to access medical records to help them better manage care.

NCHIN currently tracks who receives patient records through their system, but does not monitor what happens once the records are at the provider's office. However, providers who have a certified EMR will have that information and responsibility.

### Who is Involved in NCHIN?

Many medical providers are beginning to participate in NCHIN including: St. Joseph and Mad River Community hospitals, Humboldt-Del Norte Foundation for Medical Care, Eureka Family Practice, Open Door Community Health Centers, United Indian Health Services, the Humboldt County Department of Health and Human Services, Eureka Internal Medicine, Eureka OB/GYN, Fortuna Family Medical Group, Humboldt Medical Group, North Coast Surgical Specialists, Redwood Family Practice and other independent physician practices.

Mad River Community Hospital, United Indian Health Services and Eureka Internal Medicine have already begun transferring certain types of records

through NCHIN. The other entities are in various stages of development.

Each entity that participates in NCHIN is required to sign a contract which assures that all participating providers will meet privacy laws and regulations to protect patient information.

### Conclusion

The growing prevalence of health information technology is an inevitable change that will be coming to Humboldt County. It is important that local practices are equipped to handle this change and take advantage of the resources that EMR adoption provides. In 2015, it will be even more critical if practices hope to avoid penalties for not fully meeting Meaningful Use Criteria. NCHIN is a vital piece to the puzzle, and once again, Humboldt County has been put on the map for innovative practices in a rural community.

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### Endnotes

1. Office of the National Coordinator. Protecting Your Privacy & Security. <http://www.healthit.gov/patients-families/your-health-information-privacy>. Accessed April 2012.
2. Office of Health Information Integrity. State Privacy Laws. <http://ohii.ca.gov/privacy360/PrivacyLaws/StatePrivacyLaws.aspx>. Accessed April 2012.
3. North Coast Health Information Network. About us.northcoastthin.org/about.aspx. Accessed April 2012.
4. Health Information Technology for Economic and Clinical Health (HITECH) Act, Title XIII of Division A and Title IV of Division B of the American Recovery and Reinvestment Act of 2009 (ARRA), Pub. L. No. 111-5 (Feb. 17, 2009), codified at 42 U.S.C. §§300jj et seq.; §§17901 et seq.

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