eHealth Council

Feb. 8, 2013

1:30 PM CT – 4:00 PM CT

Main Location: Nebraska Educational Telecommunications
1800. N. 33rd Street, Board Room, 1st Floor
Videoconferencing sites
College of Public Health (MCPH) Rm # 3013

Meeting Documents

Tentative Agenda

1:30	Roll Call Notice of Posting of Agenda Notice of Nebraska Open Meetings Act Posting ***Approval of Feb. 29, 2012 minutes*--pages 3-6*** ***Approval of May 3, 2012 minutes*--page 7-10*** ***Approval of Oct. 19, 2012 minutes*--page 11-13*** Public Comment
1:40	**Membership—Renewals*--*Member list—pages 14-15*** • **Senator Annette Dubas** • **Congressman Jeff Fortenberry**, represented by Marie Woodhead • **Joni Cover,** Nebraska Pharmacists Association • **Carol Brandl**, Nebraska Statewide Telehealth Network and Bryan LGH • **Wende Baker**, Southeast Nebraska Behavioral Health Information Network • **Kay Oestmann**, Southeast District Health Department • **Alice Henneman**, University of Nebraska-Lincoln Extension in Lancaster County • **Kimberly Galt**, Creighton University School of Pharmacy and Health Professions **New Member Nominations*** • Patrick Werner, Nebraska Department of Correctional Services (replacing Steve Urosevich) **Resignations** • Donna Hammack
2:00	**Tracking Program Progress—Setting 2013 Goals*** • **ONC Tracking Progress Metrics and Goals—*pages 16-18*** • **Nebraska Tracking Progress Metrics and Goals—pages 19-25**
2:30	**State Plan Revisions-Due May 8, 2013** • **Strategic Plan** o How much do we need/want to update the strategic plan? Do we want to review vision, goals, objectives, and strategies? *Vision, goals, objectives and strategies—pages 26-29* o The Council may also want to update these sections

	• HIE Landscape • EHR Adoption • E-Prescribing • Structured Laboratory Results • Summary Care Record Exchange • Public Health The Strategic Plan is available at http://nitc.ne.gov/eHc/plan/NebStrategiceHealthPlanV6Aug2012.pdf • **Operational Plan —Required Updates** o Privacy and Security Framework o Sustainability Plan o Project Management Plan o Evaluation The Operational Plan is available at *http://nitc.ne.gov/eHc/plan/Nebraska%20State%20HIE%20Operational%20Plan%20July%202012.docx.pdf*
2:35	**Evaluation Report** • Lab Census Report—*pages 30-35* • E-Prescribing Error Initial Report--*pages 36-38*
2:45	**Updates** • **State HIE Cooperative Agreement**—*page 39* • **Health IT Legislation** o LB 260 Change requirements for a data and information system under the Nebraska Behavioral Health Services Act (Gloor) o LB 326 Change provisions of Pharmacy Practice Act and Automated Medication Systems Act (Howard) o LB 535 Adopt Prescription Monitoring Program Act and repeal prescription monitoring provisions (Lathrop) o LB 556 Provide for telehealth services for children, change the medical assistance program, and provide duties for the Department of Health and Human Services (McGill) o LB 605 Provide for Telehealth Behavioral Health Services Program (Pirsch) o LB 617 Change provisions of the Nebraska Telecommunications Universal Service Fund Act (Schumacher) • NeHII • eBHIN • Wide River Technology Extension Center • Medicaid • Division of Public Health • Nebraska Statewide Telehealth Network • HIT Policy Committee

3:15	**Sustainability Discussion** • NeHII—NeHII fact sheet Feb. 2, 2013—pp.44-45 • eBHIN • Wide River Technology Extension Center Resource: Query-Based Exchange: Key Factors Influencing Success and Failure http://www.healthit.gov/sites/default/files/query_based_exchange_final.pdf Excerpt—*page 40-43* Other reports are available at http://www.healthit.gov/policy-researchers-implementers/health-information-exchange-research
4:00	Adjourn

Meeting notice posted to the NITC and Public Meeting Websites on Feb. 5, 2013. The agenda was posted on Feb. 5, 2013.

**** Indicates action items.***

EHEALTH COUNCIL
February 29, 2012 1:30 PM CT – 4:00 PM CT
Lincoln: Nebraska Educational Telecommunications, 1800 N. 33rd, Board Rm., 1st Floor
Omaha: UNMC, College of Public Health/Maurer Center for Public Health, Room 3020
Kearney: Good Samaritan Hospital
MINUTES

MEMBERS PRESENT
Wende Baker
Susan Courtney
Joel Dougherty
Donna Hammack
Ken Lawonn
Sue Medinger
Laura Meyers
Marsha Morien
Todd Searls
Nancy Shank
Lianne Stevens
Jason Davis
Patrick Werner
Delane Wycoff

MEMBERS ABSENT: Joni Cover, Vivianne Chaumont, Senator Annette Dubas, Congressman Jeff Fortenberry, Kimberly Galt, Alice Henneman, Harold Krueger, Kay Oestmann, Rita Parris, John Roberts

Guests and Staff: Anne Byers, Lori Lopez Urdiales, Sarah Briggs and Chris Henkenius

ROLL CALL NOTICE OF POSTING OF AGENDA NOTICE OF NEBRASKA OPEN MEETINGS ACT POSTING

Ms. Morien called the meeting to order at 1:35 p.m. There were 13 members present at the time of roll call. A quorum existed to conduct official business. The meeting notice was posted to the NITC and Public Meeting websites on February 3, 2012. The meeting agenda was posted on February 24, 2012.

APPROVAL OF APRIL 1, 2011 MINUTES and the OCTOBER 5, 2011 MINUTES*

Laura Meyers' name was corrected in the April minutes. Nancy Shank's name was corrected in both April and October minutes.

Ms. Hammack moved to approve the April 1, 2011 minutes and the October 5, 2011 minutes with the name corrections. Ms. Shank seconded. Roll call vote: Courtney-Yes, Dougherty-Yes, Hammack-Yes, Lawonn-Yes, Medinger -Yes, Meyers-Yes, Morien-Yes, Searls-Yes, Shank-Yes, Stevens-Yes, Davis-Yes, Werner-Yes, and Wycoff-Yes. Results: Yes-13, No-0, Abstained-0. Motion carried.

PUBLIC COMMENT

There was no public comment.

PRESCRIPTION DRUG MONITORING PROGRAM
Dr. Joann Schaefer, Chief Medical Officer and Director, DHHS Division of Public Health, Anne Dworak and Chris Henkenius, NeHII

Dr. Joann Schaefer gave an update on Nebraska's Prescription Drug Monitoring Program (PDMP). LB 237 gave the Department of Health and Human Services the authorization to develop the infrastructure

for a Prescription Drug Monitoring Program (PDMP). Nebraska has one of the lowest drug overdose death rates in the country. Nebraska's Prescription Drug Monitoring Program is focused on improving patient care and is not accessible by law enforcement officials. Participation by physicians and other health care providers is voluntary.

Ms. Baker arrived.

Anne Dworak and Chris Henkenius provided information on NeHII 's PDMP functionality. NeHII provides real-time data which includes medication history as well as other clinical information. Ms. Dworak provided a demonstration of the system. Approximately 80-85% of prescription data is available. The project is currently working with pharmacies to enter information.

Some physicians inform patients that opting out will not provide a comprehensive history to the physician necessary to safely prescribe narcotics. The cost is $20/month for physicians/providers to be part of the system. Ms. Baker recommended that providers receive training on dealing with patients who may need treatment for addiction. NeHII is pursuing funding to develop alert functionality. NeHII demonstrated its PDMP functionality at the HIMSS conference.

MEMBERSHIP

The following members are up for membership renewals: Dr. Delane Wycoff; John Roberts; Harold Krueger; Joel Dougherty; Nancy Shank; and Donna Hammack. All have agreed to serve on the eHealth Council for another term.

Ms. Courtney moved to recommend the membership renewals to the NITC. Mr. Lawonn seconded. Roll call vote: Baker-Yes, Courtney-Yes, Dougherty-Yes, Hammack-Yes, Lawonn-Yes, Medinger - Yes, Meyers-Yes, Morien-Yes, Searls-Yes, Shank-Yes, Stevens-Yes, Davis-Yes, Werner-Yes, and Wycoff-Yes. Results: Yes-14, No-0, Abstained-0. Motion carried.

Joyce Beck and Jeff Kuhr have resigned from the Council.

UPDATING NEBRASKA'S STRATEGIC AND OPERATIONAL EHEALTH PLANS
(ONC Program Information Notice on Updating State eHealth Plans and Expected ONC Program Information Notice on Privacy and Security)

On Feb 8, 2012, the ONC released a program information notice for the requirements for updating state plans. Plans are due on May 8, 90 days after the release of the notice. A privacy and security framework section is also required, but no information has been released yet for that section.

Ms. Byers proposed the following approach to complete and submit the updated Nebraska's Strategic and Operational eHealth Plans:

- Ms. Byers has analyzed requirements and developed a work plan.
- The eHealth Council will discuss any changes to Nebraska's HIE strategy and will approve a general work plan for updating state eHealth plans in February.
- Ms. Byers will work with the Nebraska eHealth Implementation Team, the ePrescribing Work Group, and the UNMC State HIE Evaluation Team to update the Nebraska eHealth Plan. The Nebraska Department of Health and Human Services Division of Medicaid and Long-Term Care, and Public Health on plan updates.
- The Nebraska Information Technology Commission will approve any changes in HIE strategy and the work plan.
- The eHealth Council will approve targets for 2012 and a draft plan in late April or early May.

DIRECT
Chris Henkenius, NeHII

Direct provides secure messaging for the exchange of health information. NeHII has Direct set up and the cost is $15/month. Direct e-mail cannot be sent to any other e-mail system such as Hotmail, Yahoo, etc. Patients will either have to sign-up and pay for a direct e-mail address or utilize a patient portal. In some states, ONC is requiring a certain number of DIRECT users before implementation of a query-model health information exchange.

UPDATES

Expected Notice of Proposed Rule Making on Meaningful Use. ONC has released the proposed rules for Stage 2 Meaningful Use (Stage 2 NPRM) which will take effect in 2014. Members were encouraged to submit comments.

Legislation. LB 574 Adopt the Electronic Prescription Transmission Act is the only bill related to health IT this session.

Site visit by NORC at the University of Chicago. The ONC contracted with NORC at the University of Chicago to conduct case studies of HIE development in several states. Nebraska was one of the states selected. NORC will be sending Ms. Byers the initial draft of the evaluation to provide feedback prior to publishing.

Evaluation Activities. Don Klepser, University of Nebraska Medical Center, provided an update on evaluation activities. The survey of non-participating pharmacists received IRB approval. A letter was sent to pharmacists on Monday. This coming Monday, contacts will be made to approximately 42 pharmacists. It is anticipated that the survey results will be ready in April.

ONC is hosting a webinar tomorrow to discuss evaluation plans and the instrument to survey labs. In addition, the Evaluation Work Group has been working on the evaluation plan for the updated Nebraska eHealth State Plan. Ms. Byers thanked the UNMC evaluation team for their assistance.

NeHII. There are currently three hospitals in Iowa also interested in joining. Regional West in Scottsbluff is coming online. The project currently has over 800 doctors, 1,900 users, and 29 million records in the system. Agreements have been reached to provide services in Wyoming. Wyoming is working on getting 100 users on Direct.

eBHIN. Wende Baker reported that the project currently has 170 providers and over 3,000 records on the network. Plans are underway for Region I to join the network. The focus has been on the finalization and customization of the wait list referral system so that it is more manageable and not done by hand. The project received funding the Lincoln Endowment Fund to add the Peoples City Health Clinic to the network. Ms. Baker shared a sample Center Point Medications List. The project will be meeting later this month with NeHII to discuss using DIRECT to send behavioral health information to NeHII users with patient consent.

Wide River Technology Extension Center. Todd Searls reported that Wide River Technology Extension Center has met its goal of recruiting 1,000 providers. Ninety-four percent (94%) of rural providers have signed up. Over 670 physicians working with Wide River TEC are live on a certified EHR and more than 145 have already met the requirements for stage one meaningful use within the Medicare EHR Incentive Program.

A Meaningful Use summit will be held on April 4th, Anne Byers. Lt. Governor Rick Sheehy will be providing opening remarks. The afternoon panel will be discussing the future of health IT and how it will affect Nebraska and the nation. A social media network will be rolled out similar to Facebook. User groups will also be created.

Medicaid. Sarah Briggs reported that CMS has approved Nebraska's SMHP. The EHR incentive program plan will launch on May 7, 2011. Nebraska's Medicaid program has been conducting outreach activities to help providers prepare for the launch.

Nebraska Statewide Telehealth Network. Laura Meyers reported that in addition to the mobile technologies initiative, the project is looking at expanding the backbone across the state. An RFI has been released. The project is hosting three webinar luncheon series geared towards providers - 1st one will be on reimbursement; the 2nd one will be on services that can be provided including Veteran's Affairs; and the 3rd one will be on mobile technologies. The webinar series will be posted on UNMC website after they have been held.

Dr. Wycoff informed the Council that he presented on Nebraska's eHealth efforts in early February at an international congress in Portugal.

ADJOURN

With no further business, Ms. Morien adjourned the meeting at 3:18 p.m.

Meeting minutes were taken by Lori Lopez Urdiales and reviewed by Anne Byers, Office of the CIO/NITC.

EHEALTH COUNCIL
Thursday, May 03, 2012
Governor's Residence
1425 H Street, Lincoln, Nebraska
MINUTES

MEMBERS PRESENT
Wende Baker
Rama Kalli, Alt. for Susan Courtney
Donna Hammack
Alice Henneman
Sue Medinger
Marsha Morien
Patrick Werner, Alt. for Steve Urosevich
Delane Wycoff

MEMBERS ABSENT: Joni Cover, Vivianne Chaumont, Joel Dougherty; Senator Annette Dubas, Congressman Jeff Fortenberry, Kimberly Galt, Harold Krueger, Ken Lawonn, Laura Meyers, Kay Oestmann, Rita Parris, John Roberts, Greg Schieke, Nancy Shank, Lianne Stevens, and September Stone

Guests and Staff: Anne Byers, Lori Lopez Urdiales, Sarah Briggs and Deb Bass

ROLL CALL, NOTICE OF POSTING, NOTICE OF OPEN MEETING

Ms. Morien called the meeting to order at 1:35 p.m. Roll call was taken. Six voting members were present. A quorum was not present to conduct official business. The meeting proceeded with informational items.

APPROVAL OF FEBRUARY 29, 2012 MINUTES

Approval of the February 29, 2012 minutes was tabled until the next meeting due to lack of a quorum.

EVALUATION ACTIVITIES, Dr. Don Klepser, UNMC

Nebraska Hospital and Independent Lab Census. The University of Nebraska Medical Center opted to do a phone survey rather and a survey mailing to conduct a census of the Nebraska hospital and independent labs. The primary objective of the census was to determine the number of labs sending electronic lab results to ambulatory providers outside of their organization in a structured format in calendar year 2011. In addition, the ONC required that each lab be asked if they were following the LOINC (Logical Observation Identifier Names and Codes) standard.

116 Hospital labs were identified using the CMS OSCAR database
- 4 Hospitals reported that they did not have a lab
- 3 Labs had disconnected phones
- 16 Of the identified labs were duplicated (had same phone number) or reported to be serviced by another lab

93 Unique, operating, hospital laboratories were contacted
- 9 Labs (9.7%) were considered non-responders
- 84 Labs (90.3%) completed the survey

Of the 84 completed responses. Labs sending results to ambulatory providers outside of their organization electronically in a structure format in calendar year 2011:
- Yes - 17 (20.23%)
- No - 66 (78.57%)
- Did not know – 2 (2.38%)

Of the 84 completed responses. Labs following LOINC standards for test results send to ambulatory providers outside of their organization in calendar year 2012:
- Yes – 13 (15.48%)
- No – 63 (75%)
- Did not know – 8 (9.52%)

Of those submitting structured electronic results, 5 out of 17 (29.41%) followed the LOINC standards on at least some of the results sent during 2011.

Barriers to Electronic Prescribing: Nebraska's Pharmacists Perspective. The objectives of this study were to identify the barriers to adoption of e-prescribing among all non-participating Nebraska pharmacies and to describe how the lack of pharmacy participation impacts the ability of physicians to meet meaningful use criteria. Of the 23 participants, 10 (43%) reported planning to implement e-prescribing sometime in the future. Nine participants (39%) reported no intention to e-prescribe in the future citing startup costs for implementing e-prescribing, transaction fees and maintenance costs, happiness with the current system, and the lack of understanding about e-prescribing's benefits and how to implement e-prescribing. The barriers to e-prescribing identified by both late adopters and those not willing to accept e-prescriptions were similar and were mainly initial costs and transaction fees associated with each new prescription. For some rural pharmacies, not participating in e-prescribing may be a rational business decision. To increase participation, waiving or reimbursing the transaction fees, based on demographic or financial characteristics of the pharmacy, may be warranted.

A number of pharmacies included in the Surescripts list of Nebraska community pharmacies were closed, duplicates or compounding pharmacies. Cleaning up the list increased the percent of pharmacies accepting e-prescriptions by several percentage points. The cleaned up March Surescripts data indicated that approximately 94% of Nebraska pharmacies accept e-prescriptions.

NEW MEMBER

Sharon Metcalf has been nominated to serve on the NITC eHealth Council dependent upon approval by the NITC.

PLAN UPDATE AND UPDATED/NEW SECTIONS

Ms. Byers reviewed the guidance information for the new sections are required for the plan update as indicated in the Program Information Notices. (Program Information Notice 2 and Program Information Notice 3).

Sustainability: Sustainability continues to be an issue for health information exchanges across the country. The sustainability section has been updated with information on how NeHII and eBHIN are approaching sustainability.

Program Evaluation: The aim of the evaluation plan is to determine if Nebraska has achieved a functioning eHealth environment with widespread participation by providers and consumers and if investments in eHealth have led to improvements in health care quality and efficiency in Nebraska.

Key evaluation questions are listed below:

Has Nebraska achieved a functioning eHealth environment with widespread participation by providers and consumers?

- Did participation in health information exchange by hospitals, physicians, and other providers increase?
- Did the exchange of structured lab results increase?
- Did care summary exchange increase?
- Did pharmacy and prescriber participation in e-prescribing increase?
- Did utilization of Direct increase?
- Has usage of eBHIN's medication reconciliation module increased?
- Has the number of providers electronically submitting data to the immunization registry increased?
- Has the number of labs submitting data electronically to the Nebraska Electronic Disease Surveillance System (NEDSS) increased?
- Has the number of hospital emergency departments submitting syndromic surveillance data increased?
- Are most consumers willing to have their health information available through NeHII?
- Are behavioral health consumers willing to have their information available through eBHIN?

Have investments in eHealth led to improvements in health care quality and efficiency in Nebraska?

- How satisfied are the providers with HIE?
- What are the consumer concerns surrounding health information security and privacy?

- What are the levels of awareness and expectations of health information technology among consumers?
- What is the discrepancy rate between what the physician intended to prescribe and what is dispensed at the pharmacy? What are the common causes of medication errors that reach the patient?

- Does access to the results of diagnostic laboratory and radiology tests through the health information exchange reduce rate of redundant testing?
- Does access to formulary and eligibility information improve medication adherence and generic utilization rates by making that information available at the time of prescribing?
- What HIE data elements would be useful in the ER setting?
- What information not currently available in the HIE would be useful?
- What are the barriers to using HIE?
- Would changes in equipment, personnel, or care delivery be necessary to access HIE data in the emergency room setting?

Tracking Program Progress. Council members recommended the following goals for 2012:

- 95% - % of pharmacies participating in e-prescribing
- 25% - % of labs sending electronic lab results in a structured format
- 20% - % of labs sending electronic lab results to providers using LOINC
- 35% - % of hospitals sharing electronic care summaries with unaffiliated hospitals and providers
- 31% - % of ambulatory provider electronically sharing care summaries with other providers

Members recommended including a goal of 60% of hospital beds participating in query-based exchange through NeHII be included as an additional goal.

Privacy and Security Framework. The privacy and security framework focuses on seven domains:

- Individual Access
- Correction
- Individual Choice
- Collection, Use and Disclosure Limitation
- Data Quality and Integrity
- Safeguards
- Accountability

The Privacy and Security PIN issued by ONC includes recommendations for each domain. For the most part, the privacy and security policies of NeHII and eBHIN meet these recommendations. There are gaps in fully meeting the recommendations included in the PIN for the Individual Choice and Individual Access domains.

Individual Choice. The PIN recommends:
Individuals should have choice about which providers can access their information. In addition, recipients are encouraged to develop policies and technical approaches that offer individuals more granular choice than having all or none of their information exchanged.

Allowing patients to choose which providers can view their medical records is not possible today with NEHII. The only option patients have right now is to opt out.

Individual Access The PIN recommends:
Where HIE entities store, assemble or aggregate IIHI, such as longitudinal patient records with data from multiple providers, HIE entities should make concrete plans to give patients electronic access to their compiled IIHI and develop clearly defined processes (1) for individuals to request corrections to their IIHI and (2) to resolve disputes about information accuracy and document when requests are denied.

Making information available to patients is technically feasible, but involves additional costs. NeHII is working on a pilot with SimplyWell to make information available to patients. Ms. Baker informed the council that there is a Nebraska law relating to behavioral health records stating that the decision to provide the patient their private record is up to the provider due to information may cause more damage to the patient. Robert Wood Johnson has done a lot of work bringing providers and patients together to manage their health care. They continue to push new directions. ONC indicated in a conference call discussing the PIN that the recommendation would not apply to behavioral health information.

Members were asked to provide Ms. Byers their feedback. Ms. Byers suggested that Council members read the PIN on Privacy and Security Frameworks for future discussion.

Ms. Hammack left the meeting.

UPDATES

NEHII, Deb Bass. On July 24, 2012 NEHII will hold their annual meeting at the Gering Civic Center in Gering, Nebraska. Sustainability discussions have been occurring. Over 2,000 users are participating in NEHII. The Prescription Drug Monitoring Program(PDMP) functionality is proving to be a physician satisfier. NeHII is getting requests from other states for information on the PDMP functionality. Phase 2 of the immunization registry is underway.

e**BHIN, Wende Baker.** The project is in the process of going live with info exchange. The anticipated go live date is June 2012. Region 6 (Omaha) and Region 1 (Panhandle) will hopefully be up in 2013. There is a planning grant to look at feasibility of getting Regions 2, 3, and 4 into the eBHIN. eBHIN is participating in an ONC behavioral health consortium. The concept is to have a platform for interstate exchange of behavioral health records.

DHHS, Sarah Briggs. On May 7th the Medicaid Electronic Health Record Incentive Program will go live!

CIMRO of Nebraska/Wide River Technology Extension Center,. The project has reached its goal of enrolling providers. More detailed information available via the above link.

ADJOURN

With no further business, Ms. Morien adjourned the meeting at 3:39 p.m.

Meeting minutes were taken by Lori Lopez Urdiales and reviewed by Anne Byers, Office of the CIO/NITC.

EHEALTH COUNCIL
Friday, October 19, 2012
SCC Continuing Education Center
301 South 68th Street Place, Room 304

MINUTES

MEMBERS PRESENT
Rama Kolli, Alt. for Susan Courtney
Donna Hammack
Sharon Medcalf
Jenifer Roberts-Johnson Alt. for Sue Medinger
Gregg Schieke
Nancy Shank
Jason Davis, Alt. for September Stone
Patrick Werner, Alt. for Steve Urosevich
Delane Wycoff

MEMBERS ABSENT: Wende Baker, Vivianne Chaumont, Joni Cover, Joel Dougherty, Senator Annette Dubas, Congressman Jeff Fortenberry, Kimberly Galt, Alice Henneman, Harold Krueger, Ken Lawonn, Marsha Morien, Kay Oestmann, and John Roberts.

Guests and Staff: Anne Byers, Jeanine Yost, Sarah Briggs, Deb Bass, Eric Henrichsen, and Tim Gay

ROLL CALL, NOTICE OF POSTING, NOTICE OF OPEN MEETING

Dr. Wycoff called the meeting to order at 1:37 p.m. Roll call was taken. Nine voting members were present. A quorum was not present to conduct official business. The meeting proceeded with informational items.

PUBLIC COMMENT

Dr. Wycoff asked if there was any public comment. Visitor Tim Gay from Husch Blackwell introduced himself.

APPROVAL OF FEBRUARY 29, 2012 and MAY 3, 2012 MINUTES

Approval of the February 29, 2012 minutes and the May 3, 2012 minutes was tabled until the next meeting due to lack of a quorum.

EVALUATION ACTIVITIES

In the absence of Ms. Morien, Ms. Byers reported to the group regarding grant evaluation activities. Ms. Byers stated that $6.8 million had been awarded for the State HIE Cooperative Agreement. UNMC is serving as the external evaluator for the grant. The evaluation team includes Marsha Morien, Gary Cochran, Don Klepser, and Lina Lander.

The evaluation team submitted results of a study on pharmacy barriers to e-prescribing for publication in the *Journal of Rural Health*. The survey found that the biggest barriers to pharmacy participation are the transaction cost and the cost of upgrading pharmacy systems. Physician use of e-prescribing is a driver for pharmacy participation. Both the number of prescribers and pharmacies participating in e-prescribing has increased steadily. ONC is concerned that there may be some eligible providers who don't qualify for meaningful use because the local pharmacy doesn't accept e-prescriptions. The e-prescribing group has been trying to encourage discussions between pharmacists and prescribers. Wide River Technology Extension Center has included several panel discussions as part of their workshops.

The evaluation team is also completing a pilot study to determine discrepancies between what the physician intended to prescribe and what was dispensed by the pharmacy.

A provider focus group was conducted to refine the questions which will be included in a provider survey. Preliminary results of the focus group indicate interest in health information exchange, but a lack of knowledge about how physicians are going to use HIE.

PAYER ACCESS TO HIE

Deb Bass gave a presentation on payer access to health information exchange. Blue Cross Blue Shield of Nebraska has been a stakeholder participant in NeHII since 2005. A manual work around for payer access was negotiated. The workaround involved a payer requesting permission of the various health systems to view medical records on a daily basis.

The solution currently being piloted by Blue Cross Blue Shield of Nebraska involves a combination of administrative and technical safeguards.

- Technical safeguards
  - Payers restricted to accounts in daily eligibility file
  - Date range filter on the VHR
- Administrative safeguards (selected)
  - Policy 400: access PHI only in a manner consistent with all applicable federal, state and local laws
  - Policy 600: specific limitations on payer access – minimum necessary, no access if self-pay
  - Episode of Care default for each use case, typically less than 18 months

- The pilot was developed to determine whether efficiencies are created by utilizing the NeHII VHR and focuses on the following payer use cases:
  - Utilization Management (Medical and Pharmacy)
    - Pre Authorizations
    - Medical Claims Review
    - Appeals
  - Case/Disease Management
  - Hospital Acquired Conditions (HACs)

Blue Cross Blue Shield of Nebraska identified pilot participants in each department while leaving control group performing current paper process. Participants agreed to abide by NeHII and Payer policies including Minimum Necessary. Pilot participants complete a survey each time the VHR is used. Pilot results will be measured at 30, 60, and/or 90 days.

MEMBERSHIP – NEW MEMBERS

Dr. Wycoff presented the names of persons being considered for membership: Jenifer Roberts-Johnson, Carol Brandl and Marty Fattig. Biographical information was included with the meeting documents. Their nominations will be forwarded to the NITC.

UPDATED STRATEGIC AND OPEATIONAL EHEALTH PLANS

Ms. Byers stated that the revised eHealth plans have been submitted. The revised strategic plan includes no significant changes in direction. The operational plan includes some new sections. Members are encouraged to submit comments. The next revision is due in the spring.

IT PROJECT REVIEWS – eHealth Council Recommendations

Ms. Byers stated that the Nebraska Information Technology Commission is charged with reviewing IT proposals and prioritizing them for the Legislature and the Governor. This year several proposals have been submitted. Ms. Byers asked Council members to make comments as the proposals are discussed.

Eric Henrichsen from the Department of Health and Human Services discussed the proposals and answered questions.

The Behavioral Health Data System project (25-07) would implement a new centralized data system to track outcomes of managed care, measure performance of managed care, measure funding for managed care, provide for greater fiscal accountability for managed care, meet reporting needs of the Division of Behavioral Health to Federal and State entities, unify existing databases and technology, fill data gaps, and utilize health information exchange efficiencies by interfacing with the State health information exchange. Members commented that there may be opportunities to leverage the investments made in eBHIN and encouraged DHHS to continue exploring options to work with eBHIN.

The Affordable Care Act IT Implementation project (25-01) is a conglomeration of approximately 41 activities related to Medicaid eligibility, expanding Medicaid benefits, Medicaid financing, program integrity, American Indian related provides, and other provisions.

The ICD10 (25-02) project deals with the change in diagnostic codes from ICD-9 to ICD-10. The project involves a lot of mapping. This project will impact the Medicaid and Long-Term Care division, its business processes and systems, including the Medicaid Management Information System (MMIS).

The State Medicaid HIT Plan project (25-03) includes funding for updating the State Medicaid HIT Plan and updating the MMIS system to meet the Medicaid EHR Incentive Program attestation requirements.

The Medicaid Management Information System (MMIS) Replacement Study (25-04) would fund a study to replace the legacy MMIS system certified in 1978. The legacy system handles the processing of fee for services claims reasonably well. However, the business of Medicaid has changed significantly. The MMIS file structure is too limited to allow CMS mandates to be fully implemented without extensive, costly modifications. Lack of compliance places Nebraska at risk of a reduced Federal Financial Participation. The MMIS Replacement project (25-05) includes funding for replacing Nebraska's MMIS.

The Medicaid Managed Care Expansion project (25-06) includes enhancements to the current MMIS system to support Medicaid's expanded utilization of managed care for the delivery of Medicaid services.

The Department of Insurance's Nebraska Exchange project (22-01) would include the design, development, and implementation of a health insurance exchange. This is a huge project with many unknowns.

NEBRASKA UPDATES

Anne Byers said that NeHII has launched a new consumer campaign using Connect the "Docs" as the theme. She showed the video located on the NeHII consumer website (http://www.connectnebraska.net) or by going to www.nehii.org and clicking on the consumer website link. The video does a good job of explaining the health information exchange.

Wendy Baker sent an update. eBHIN is currently working on deployment in three regions. Region 5 in Southeast Nebraska is finishing up their Health Information Exchange deployment. In Region 6 in the Omaha area, efforts are focused on organizational activities. Participants in Region 6 will probably be ready to "Go Live" in January of 2013. Region 1 in the Panhandle has been working on their EPM and will be starting on HIE deployment in the coming months. Assessment and planning activities are underway in regions 2, 3, and 4.

Carol Brandl sent an update on the telehealth network. The Nebraska Statewide Telehealth Network's OAT grant has ended. DKG will be completing final reports for the grant and will be ending their service with the network by the end of January 2013. The telehealth network's use of mobile applications using Vidyo has been well-received by physicians.

At the end of the packet Ms. Byers included an update on the grant including a map showing the states ONC recognized for advancing query model exchange. ONC conducted a desk audit of the State HIE Cooperative Agreement, finding that overall the Office of the CIO/NITC is in compliance. The last page of the meeting document packet summarizes current expenditures. To date, 86% of the grant funds have been expended.

Greg Schieke reported that Wide River TEC is working with over 1000 primary care practitioners with 820 at go-live. Over 200 have attested to Meaningful Use. That number is projected to be 350 by the end of the year. Rural health clinics are an area of concern, because most rural health clinics don't qualify for the incentive program.

ADJOURN

With no further business, Dr. Wycoff adjourned the meeting at 3:45 p.m.

eHealth Council Members

The State of Nebraska/Federal Government

- **Senator Annette Dubas**, Nebraska Legislature (term ends Dec. 2010, renew every 2 years)
- **Steve Urosevich (**term ends Dec. 2012)
- **Congressman Jeff Fortenberry**, represented by Marie Woodhead (term ends Dec. 2012, renew every 2 years)

Health Care Providers

- **Marty Fattig**, Nemaha County Hospital (term ends Dec. 2013)
- **Dr. Delane Wycoff**, Pathology Services, PC (term ends Dec. 2014)
  - **Dr. Harris A. Frankel** (alternate)
- **Joni Cover,** Nebraska Pharmacists Association (term ends Dec. 2012)
- **September Stone**, Nebraska Health Care Association (term ends Dec. 2013)
  - **Jason Davis**, Vetter Health Services, Inc. (alternate)
- **John Roberts**, Nebraska Rural Health Association (term ends Dec. 2014)

eHealth Initiatives

- **Carol Brandl**, Nebraska Statewide Telehealth Network and Bryan LGH (term ends Dec. 2012)
- **Ken Lawonn**, NeHII and Alegent Health (term ends Dec. 2013)
- **Harold Krueger**, Western Nebraska Health Information Exchange and Chadron Community Hospital (term ends Dec. 2014)
- **Wende Baker**, Electronic Behavioral Health Information Network (term ends Dec. 2012)

Public Health

- **Jenifer Roberts-Johnson**, Department of Health and Human Services, Division of Public Health (term ends Dec. 2013)
- **Sharon Medcalf**, UNMC College of Public Health (term ends Dec. 2014)
  - **Rita Parris**, Public Health Association of Nebraska, alternate
- **Kay Oestmann**, Southeast District Health Department (term ends Dec. 2012)
- **Marsha Morien**, UNMC College of Public Health (term ends Dec. 2013)
- **Joel Dougherty**, OneWorld Community Health Centers (term ends Dec. 2014)

Payers and Employers

- **Susan Courtney**, Blue Cross Blue Shield (term ends Dec. 2012)
    - Rama Kalli, Blue Cross Blue Shield (alternate)
- **Vivianne Chaumont**, Department of Health And Human Services, Division of Medicaid and Long Term Care (term ends Dec. 2013)

Consumers

- **Nancy Shank**, Public Policy Center (term ends Dec. 2014)
- **Alice Henneman**, University of Nebraska-Lincoln Extension in Lancaster County (term ends Dec. 2012))

Resource Providers, Experts, and Others

- **Kimberly Galt**, Creighton University School of Pharmacy and Health Professions (term ends Dec. 2012).
- **Greg Schieke, Wide River Technology Extension Center** (term ends Dec. 2013)
    - Todd Searls, Wide River Technology Extension Center (alternate)
- **Vacant**

Tracking Program Progress

	Report May 2012		Report January 2013	
Program Priority	**Status as of December 2011**	**Target for December 2012**	**Status as of December 2012**	**Target for December 2013**
% of pharmacies participating in e-prescribing	**90%** **Source**: Surescripts Data Dec. 2011 National Actual: 92%	**95%** National Goal: 94%	95% **Source:** Surescripts Data pharmacies on network Dec. 2012	National Goal: 95%
% of labs sending electronic lab results to providers in a structured format	**20%** **Source:** UNMC Lab census conducted in March 2012	**25%**	**47%** **Source:** UNMC Lab Census conducted in January 2013	
% of labs sending electronic lab results to providers using LOINC	**15%** **Source:** UNMC Lab census conducted in March 2012	**20%**	**22%** **Source:** UNMC Lab Census conducted in January 2013	
% of hospitals sharing electronic care summaries with unaffiliated hospitals and providers	**34%** **Source:** AHA Survey, 2010 National Actual: 27%	**35%** **National Goal:** 45%	2011 AHA survey results unavailable 20% of Nebraska hospitals are participating in NeHII.	National Goal: 55%

	Report May 2012		Report January 2013	
Program Priority	**Status as of December 2011**	**Target for December 2012**	**Status as of December 2012**	**Target for December 2013**
% of ambulatory providers electronically sharing care summaries with other providers	**27%** **Source:** NAMCS survey, 2010 National Actual: 31%	**31%** National Goal: 40%	2011 NAMCS survey results unavailable 1,131 physicians participating in NeHII Surescripts estimate of number of physicians in Nebraska is 3,383. Health Professions Tracking estimate is 3,705. This includes academics who may not see patients. 33% of physicians are NeHII participants using the Surecripts estimate.	National Goal: 50%
Public Health agencies receiving ELR data produced by EHRs or other electronic sources using HL7 2.5.1 LOINC and SNOMED.	100% **Source:** NDHHS Division of Public Health	100%	100%	100%
Immunization registries receiving electronic immunization data produced by EHRs in HL7 2.3.1 or 2.5.1 formats using CVX code.	100% **Source:** NDHHS Division of Public Health	100%	100%	100%
Public Health agencies receiving electronic syndromic	100%	100%	100%	100%

	Report May 2012		Report January 2013	
Program Priority	**Status as of December 2011**	**Target for December 2012**	**Status as of December 2012**	**Target for December 2013**
surveillance hospital data produced by EHRs in HL7 2.3.1 or 2.5.1 formats (using CDC reference guide).	**Source:** NDHHS Division of Public Health			
Public Health agencies receiving electronic syndromic surveillance ambulatory data produced by EHRs in HL7 2.3.1 or 2.5.1.	100% **Source:** NDHHS Division of Public Health	100%	100%	100%

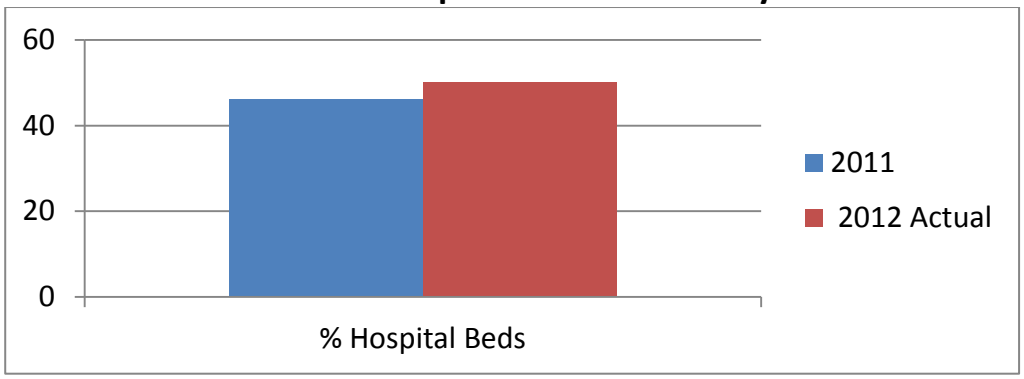
Structured format: Documentation of discrete data using controlled vocabulary, creating fixed fields within a record or file, or another method that provides clear structure to information (is not completely free text)

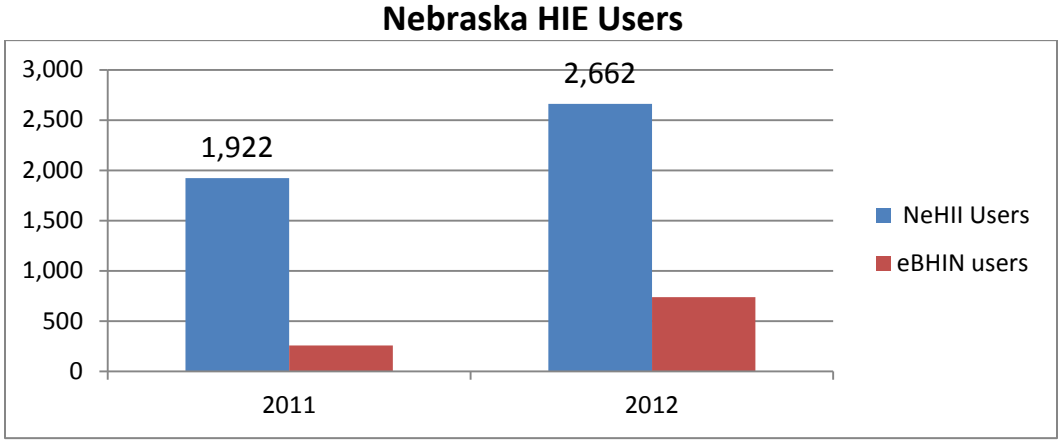
Nebraska HIE Goals and Tracking

January 2013

Participating Hospitals—NeHII

% of Nebraska Hospital Beds Covered by NeHII





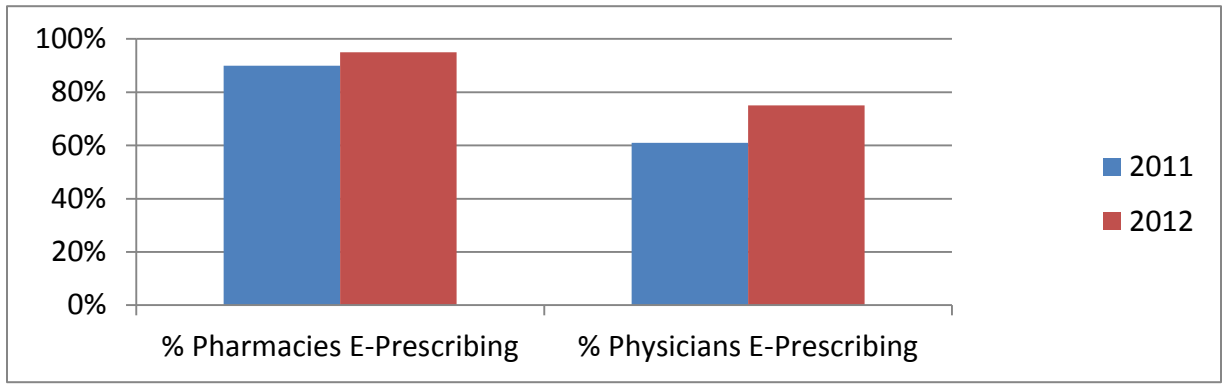
Nebraska HIE Metrics

Measure	Baseline 2011	Target 2012	Actual 2012	Target 2013
Individual users enabled for query-based exchange through NeHII	1,922 total users	2,500 total users	2,662 total users	3,062 total users
Individual users enabled for query-based exchange through eBHIN	259 providers with EPM/0 providers on HIE	905 total users	217 individual HIE users from 11 organizations Additionally, eBHIN has 264 EHR users and 257 EPM users	300 HIE users
Acute Care Hospitals Actively Participating in Query-Based Exchange through NeHII	17 hospitals (14 Nebraska and 3 Iowa) **Participating Hospitals--NeHII** • Bellevue Medical Center - Bellevue, NE • Bergan Mercy Hospital - Omaha, NE • Children's Hospital and Medical Center - Omaha, NE	27 hospitals	22 hospitals **Participating Hospitals--NeHII** • Bellevue Medical Center - Bellevue, NE • Bergan Mercy Hospital - Omaha, NE • Children's Hospital and Medical Center - Omaha, NE • Great Plains Regional Medical Center – North Platte, NE • Lakeside Hospital - Omaha, NE	33 hospitals

	• Great Plains Regional Medical Center – North Platte, NE • Lakeside Hospital - Omaha, NE • Immanuel Hospital - Omaha, NE • Mary Lanning Memorial Hospital - Hastings, NE • Memorial Hospital -Schuyler, NE • Methodist Hospital - Omaha, NE • Methodist Women's Hospital – Omaha, NE • Midlands Hospital -Papillion, NE • Nebraska Spine Hospital - Omaha, NE • The Nebraska Medical Center - Omaha, NE • Community Memorial Hospital - Missouri Valley, IA • Mercy Hospital - Corning, IA • Mercy Hospital - Council Bluffs, IA		• Immanuel Hospital - Omaha, NE • Mary Lanning Memorial Hospital - Hastings, NE • Memorial Hospital -Schuyler, NE • Methodist Hospital - Omaha, NE • Methodist Women's Hospital – Omaha, NE • Midlands Hospital -Papillion, NE • Nebraska Spine Hospital - Omaha, NE • The Nebraska Medical Center - Omaha, NE • Community Memorial Hospital - Missouri Valley, IA • Mercy Hospital - Corning, IA • Mercy Hospital - Council Bluffs, IA • Regional West Medical Center - Scottsbluff • Columbus Community Hospital – Columbus • Sidney Regional Medical Center - Sidney • Avera Creighton - Creighton • Avera St. Anthony's – O'Neill Note: Hospitals under implementation at the close of 2012 include: • Beatrice Community Hospital • Boys Town Hospital • Cass County Hospital (Atlantic, IA) • York General Hospital • Providence Medical Center (Wayne)	
% of Nebraska Hospital Beds Participating in Query-Based Exchange through NeHII	46%	60%	51%	TBD—NeHII will have an estimate by Friday, Feb. 8

Hospital Behavioral Health Units Participating in eBHIN	0	3	0	
Laboratories actively participating in query-based exchange	17 hospital-based laboratories (14 Nebraska and 3 Iowa) **Hospital-Based Laboratories Participating in NeHII** • Bellevue Medical Center - Bellevue, NE • Bergan Mercy Hospital - Omaha, NE • Children's Hospital and Medical Center - Omaha, NE • Great Plains Regional Medical Center - North Platte, NE • Lakeside Hospital - Omaha, NE • Immanuel Hospital - Omaha, NE • Mary Lanning Memorial Hospital - Hastings, NE • Memorial Hospital -Schuyler, NE • Methodist Hospital - Omaha, NE • Methodist Women's Hospital – Omaha, NE • Midlands Hospital -Papillion, NE • Nebraska Spine Hospital - Omaha, NE • The Nebraska Medical Center - Omaha, NE • Community Memorial Hospital - Missouri Valley, IA • Mercy Hospital, Corning, IA • Mercy Hospital – Council Bluffs, IA	1 independent reference lab and 27 hospital-based laboratories	22 hospital-based laboratories Participating Hospitals--NeHII • Bellevue Medical Center - Bellevue, NE • Bergan Mercy Hospital - Omaha, NE • Children's Hospital and Medical Center - Omaha, NE • Great Plains Regional Medical Center – North Platte, NE • Lakeside Hospital - Omaha, NE • Immanuel Hospital - Omaha, NE • Mary Lanning Memorial Hospital - Hastings, NE • Memorial Hospital - Schuyler, NE • Methodist Hospital - Omaha, NE • Methodist Women's Hospital – Omaha, NE • Midlands Hospital - Papillion, NE • Nebraska Spine Hospital - Omaha, NE • The Nebraska Medical Center - Omaha, NE • Community Memorial Hospital - Missouri Valley, IA • Mercy Hospital - Corning, IA • Mercy Hospital - Council Bluffs, IA	33 laboratories

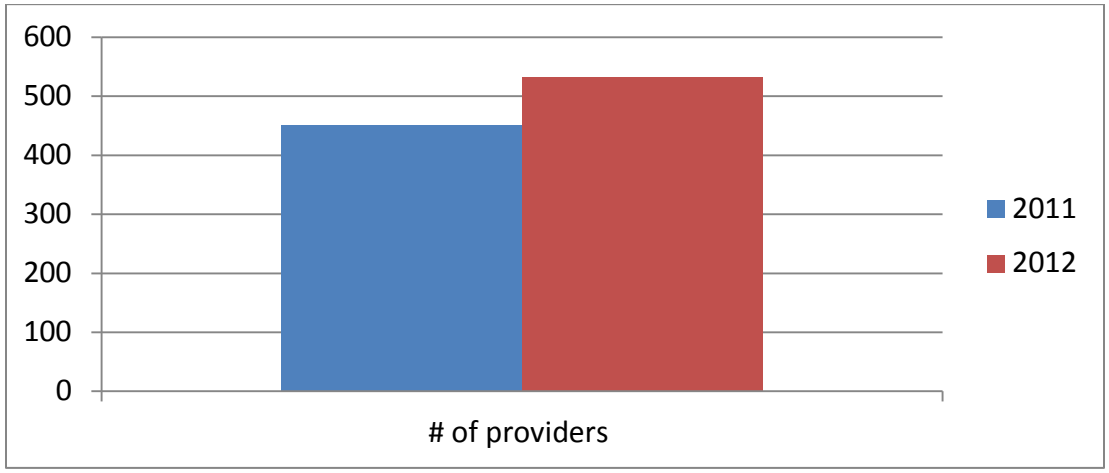
			• Regional West Medical Center - Scottsbluff • Columbus Community Hospital – Columbus • Sidney Regional Medical Center - Sidney • Avera Creighton - Creighton • Avera St. Anthony's – O'Neill Note: Hospitals under implementation at the close of 2012 include: • Beatrice Community Hospital • Boys Town Hospital • Cass County Hospital (Atlantic, IA) • York General Hospital • Providence Medical Center (Wayne)	



E-Prescribing Adoption

Measure	Baseline 2011	Target 2012	Actual 2012	Target 2013
% of community pharmacies activated for e-prescribing	90%	95%	95% Dec. 2012	95%
% of physicians e-prescribing	61%	75%	74% Dec. 2012	89%

Providers Submitting to Immunization Registry



Providers Submitting to Immunization Registry/Public Health Reporting

Measure	Baseline 2011	Target 2012	Actual 2012	Target 2013
Total Number of Providers Submitting to Immunization Registry	450**	750	532*	750
Number of Providers Submitting to Immunization Registry Electronically	136	436	193*	436
# of labs submitting data to NEDSS	16	20	17	23
# of hospitals submitting data to the syndromic surveillance system	16	24	17	24
# of ambulatory providers/clinics submitting syndromic surveillance data		12	1	12

*It is important to note that this is the number of "distinct" connections we have with facilities/vendors and some of these facilities/vendors send for multiple facilities/locations. For example – Mollen Immunization Clinics is counted as "1" connection but they send for all WalMart and Sam's Club locations across the State of NE. Same thing for Shopko – they are 1 connection but send for all locations in NE. Some vendors send data for multiple participating clinics – they may be listed as 1 "connection" but send for multiple facilities.

eHealth Vision, Goals, Objectives and Strategies

Vision

Stakeholders in Nebraska will cooperatively improve the quality and efficiency of patient-centered health care and population health through a statewide, seamless, integrated consumer-centered system of connected health information exchanges. Nebraska will build upon the investments made in the state's health information exchanges and other initiatives which promote the adoption of health IT.

Goals

These goals will be achieved while ensuring the privacy and security of health information, which is an essential requirement in successfully implementing health information technology and exchanging health information:

- Using information technology to continuously improve health care quality and efficiency through the authorized and secure electronic exchange and use of health information.
- Improve patient care and consumer safety;
- Encourage greater consumer involvement in personal health care decisions;
- Enhance public health and disease surveillance efforts;
- Improve consumer access to health care;
- Improve consumer outcomes using evidence-based practices.

Objectives

Adoption

- Encourage and support the adoption of health IT in order to achieve meaningful use by providers.
- Build an appropriately-trained, skilled health information technology workforce.
- Encourage and support the adoption of personal health records.
- Improve health literacy in the general population.

Governance

- Address issues related to governance, oversight, and financing of health information exchange.
- Ensure transparency, accountability, and privacy.

Finance

- Support the development of a sustainable business model for building and maintaining health information exchange in Nebraska.
- Leverage the state's role as a payer to support health information exchange.

Technical Infrastructure

- Support the development and expansion of health information exchanges to support meaningful use and to improve the quality and efficiency of care.
- Support the development of interconnections among health information exchanges in the state and nationwide.
- Promote the development of a robust telecommunications infrastructure.
- Ensure the security of health information exchange.

Business and Technical Operations

- Support meaningful use.
- Encourage the electronic exchange of public health data.
- Encourage the integration of health information exchange with telehealth delivery.

Legal and Policy

- Continue to address health information security and privacy concerns of providers and consumers.
- Build awareness and trust of health information technology.

Strategies

Adoption

- Partner with the Regional Center serving Nebraska to facilitate provider adoption of EMRs and attainment of meaningful use requirements.
- Work with eligible providers to utilize Medicaid and Medicare incentives.
- Encourage efforts to offer affordably priced and effective EMR options.
- Consider the needs and uses of all providers.
- Spread innovation by highlighting successful provider implementation models (i.e., physician practices, critical access hospitals, long term care facilities, and pharmacies).

Governance

- Formalize the relationships among and responsibilities of NeHII, the state's regional and specialty health information exchanges, the Nebraska Department of Health and Human

services including Medicaid and public health, the State HIT Coordinator, and the NITC eHealth Council.
- Develop mechanisms to ensure accountability, transparency, and privacy.

Finance

- Encourage and support the effective use of investments to obtain meaningful use, including:
- Leveraging existing and planned investments in health information exchange, public health, Medicaid, and other programs.
- Leveraging Medicaid administrative funding for provider incentives.
- Leveraging other programs which support health information exchange, workforce development, and broadband development.
- Identifying sources of grant funding to fund start up costs and accelerate implementation.
- Determine where value is being delivered in the HIE network and tie the primary ongoing HIE revenue streams to value delivered.
- Market the benefits of health information exchange services to providers.

Technical Infrastructure

- Facilitate participation in existing health information exchanges to ensure statewide coverage.
- Coordinate the statewide technical architecture to support HIE integration.
- Assure the technical architecture meets the overall clinical and policy objectives of the state.
- Enumerate the critical environmental assumptions that the technical architecture must address, including interactions among HIEs and other partners.
- Address issues related to broadband access and affordability if necessary.

Business and Technical Operations

- Continuously assess and prioritize additional functionality to address meaningful use requirements.
- Support the development of effective analytics reporting for decision support and quality reporting.
- Encourage and support e-prescribing and refill requests.
- Provide prescription fill status and/or medication fill history.
- Encourage and support the provision of electronic health information to patients.
- Partner with payers and other stakeholders to develop strategies to improve care coordination and quality and efficiency of health care.
- Encourage electronic reporting and use of public health data.
- Provide electronic eligibility and claims transactions.
- Provide electronic clinical laboratory ordering and results delivery.
- Provide clinical summary exchange for care coordination and patient engagement.

Legal/Policy

- Coordinate with the Attorney General's Office, State HIT Coordinator, and the privacy and security officers of the state's HIEs to develop a framework for privacy and security enforcement.
- Continue to review and update privacy and security policies.
- Investigate statutory barriers to health information exchange.
- Provide information on privacy and security to providers and consumers through a statewide consumer education campaign, a privacy and security website, and a brochure for statewide distribution.
- Establish a collaborative infrastructure with the ongoing capacity to identify issues, consider options, and advance recommendations through a transparent and inclusive decision-making process.
- Encourage the harmonization of policies related to access, authentication, audit and authorization.

NEBRASKA LAB CENSUS 2012

Daniel Lomelin, BS

Donald G. Klepser, PhD

Gary L. Cochran, PharmD

Lina Lander, ScD

Marsha Morien, MSBA

University of Nebraska Medical Center

College of Pharmacy and College of Public Health

January 18, 2013

As part of the ongoing evaluation by to the Office of the National Coordinator (ONC), all State Health Information Exchanges are required to conduct a census of hospital and independent laboratories within their respective states. The primary objective of the report was to determine the number of labs sending electronic results to ambulatory providers outside of their organization in a structured format in 2012. In addition, the ONC required each lab to report whether they comply with the Logical Observation Identifiers Names and Codes (LOINC) standards.

Telephone survey of all laboratories in Nebraska was conducted by a single trained caller and a script adapted from the NORC survey. Labs which had reported not sending results to ambulatory providers electronically in a structured format, or which had not completed an interview during the last census, were contacted to determine the number of new users.

Summation of Key findings between 2011 and 2012:

- **Labs sending results to ambulatory providers outside of their organization electronically in a structured format**

	2011	2012	% Change
Hospital Labs	17/93 (18.3%)	35/93 (37.6%)	+19.3%
Independent Labs	25/37 (67.6%)	26/37 (70.3%)	+2.7%

- **Labs following LOINC standards for test results sent to ambulatory providers outside of their organization**

	2011	2012	% Change
Hospital Labs	13/93 (13.9%)	25/93 (26.9%)	+13.0%
Independent Labs	3/37 (8.1%)	3/37 (8.1%)	0%

***Total lab denominators of 93 hospital labs and 37 independent labs were utilized from those identified as unique, operating laboratories from the CMS OSCAR system during the first census*

The results were as follows:

75 Hospital labs were identified from the results of the 2011 survey as non-users:

7 Labs were unable to be contacted, of which:

2 were wrong numbers

5 calls were never answered

68 Unique, operating, hospital laboratories were contacted

1 Lab (1.5%) refused to participate

7 Labs (10.3%) stated they were too busy

5 Labs (7.4%) reached answering machines

55 Labs (80.9%) completed the survey

Of the 55 completed surveys:

Labs sending results to ambulatory providers outside of their organization electronically in a structured format in calendar year 2012:

Yes – 18 (32.7%)

No – 36 (65.5%)

Did not know – 1 (1.8%)

Labs following LOINC standards for test results sent to ambulatory providers outside of their organization in calendar year 2012

Yes - 12 (21.8%)

No - 18 (32.7%)

Did not know – 25 (45.5%)

Of the laboratories submitting structured electronic results, 6 out of 18 (33.3%) followed the LOINC standards on at least some of the results sent during 2012.

Of those submitting structured electronic results (n = 18), the proportion of results being sent to EHRs and web portals were:

	EHR	Web Portal
0%	0 (0%)	7 (38.9%)
1-24%	1 (5.6%)	0 (0%)
25-49%	0 (0%)	2 (11.1%)
50-74%	2 (11.1%)	0 (0%)
75-99%	7 (38.9%)	0 (0%)
100%	7 (38.9%)	2 (11.1%)
Do not know	1 (5.6%)	7 (38.9%)

Hospital Laboratories Stratified by billable test volume:

Billable Tests	Labs	Sending Results Electronically in a Structured Format
<100,000	45	12/45 (26.7%)
100,000-499,999	7	5/7 (71%)
500,000-999,999	1	1/1 (100%)
Do not know	2	0/2 (0%)
	Total: 55 labs	Total: 18 labs

Out of the 55 responders, 3 (5.5%) reported using the LRI guide, 14 (25.5%) reported not using the LRI guide, and 38 (69.1%) did not know.

1 of 3 labs (33.33%) that indicated they had implemented the LRI guide, were also sending lab results electronically in a structured format. Four out of 14 labs (28.6%) that indicated they *did not* use the LRI guide also were sending lab results electronically in a structured format. Also, 13 out of 38 labs (34.2%) which *did not know* whether they used the LRI guide, also sent lab results electronically in a structured format.

Of hospital labs that completed the census 11 out of 55 (20.0%) reported following Health Level 7 (HL7) message standards; only 1 lab (1.8%) identified the version as HL7 2.5.1, the remaining 10 labs were unaware of the HL7 version used. Six of the 11 (54.6%) labs using HL7 message standards also transmitted lab results electronically in a structured format.

Results of Independent laboratories:

8 Independent laboratories were identified from the results of the 2011 survey as being non-users:

8 Independent laboratories were contacted:

2 Labs (25%) did not respond to repeated contacts

6 Labs (75%) completed the survey

Of the 6 completed responses:

Labs sending results to ambulatory providers outside of their organization electronically in a structured format in calendar year 2012:

Yes - 1 (16.7%)*

No - 5 (83.3%)

Did not know - 0 (0%)

*This lab reported "yes", but also specified they did not sent labs outside of their own medical system; it should probably be excluded from the numerator and denominator in the future.

Of those that completed the survey (n=6), the proportion of results being sent to EHRs and web portals were:

	EHR	Web Portal
0%	5 (83.3%)	6 (100%)
1-24%	0 (0%)	0 (0%)
25-49%	0 (0%)	0 (0%)
50-74%	0 (0%)	0 (0%)
75-99%	0 (0%)	0 (0%)
100%	1 (16.7%)*	0 (0%)
Do not know	0 (0%)	0 (0%)

*The same lab reported sending lab results electronically

Labs following LOINC standards for test results sent to ambulatory providers outside of their organization in calendar year 2012:

Yes – 0 (0%)

No – 4 (66.7%)

Did not know - 2 (33.3%)

Of the 6 independent laboratories which responded, 5 (83.3%) did not know whether they implemented the LRI guide and 1 (16.67%) reported that their lab had not.

None of the 6 labs that completed the census could confirm the use of HL7 standards, only 1 respondent had heard of HL7 standards (16.67%) . In additon, 1 (16.7%) of the labs reported the use of completely hand written results.

e-Prescribing Pilot Study
Pilot Clinic Summary

102 prescriptions evaluated
14 prescribers wrote 102 prescriptions for 73 patients (60% female).

Age Range:	Number of Prescriptions:
0-2:	3
3-12:	2
13-18:	3
19-65:	86
>65:	8

49 discrepancies were the result of authorized generic substitutions

13 discrepancies were the result of different quantities transmitted by the clinic and dispensed by the pharmacy.

Topical: 4
Inhaler: 5
Ophthalmic: 2
Oral Liquid: 1
Oral contraceptive: Qty Prescribed = 30; Qty Dispensed = 28

Seven discrepancies (6.9%) were identified that may be either associated with an error, or increased the likelihood that an error could occur. The majority of the discrepancies were associated with differences between the directions for use recorded in the patient's medical record and the directions included on the pharmacy label. One discrepancy appears to be the result of sending prescriptions for the wrong patient. With the exception of discrepancies in quantities for topical and inhaled medications, no discrepancies between the clinic's electronic prescription and the pharmacy label were identified. In one case, the patient's medical record included more detailed instruction than what was entered into the electronic prescription. One discrepancy was likely the result of therapeutic substitution, however, no note authorizing the substation was found in the patient's record. Descriptions of the 7 discrepancies are listed below.

<u>Discrepancy between Physician Intent and Pharmacy Label</u>

1. The difference in directions between prescriber intent and the pharmacy label resulted in the potential for the patient to be under dosed. On follow-up, the pharmacist said that the e-script came through with 4 tablets per day maximum (as indicated on the label).
   ID 6: Phrenilin 50-325mg
   Physician: 1-2 tablets every 4 hours PRN not to exceed 6/day
   Pharmacy: 1 tablet every 4 hours not to exceed 4 in 24 hours

2. The difference between prescriber intent and the pharmacy label likely resulted in under dosing the patient. The e-script dose transmitted to the pharmacy listed an every 6 hour dosing interval. It is unclear which dose is correct, but physician intent and the prescription label differ.
   ID 61: Cephalexin 500mg
   Physician: take 1 tablet by oral route every 6 hours
   Pharmacy: take 1 capsule by mouth twice daily

3. It appears that a provider transmitted 2 prescriptions (2 discrepancies) for the wrong patient. It is unclear how the error was identified, but the prescriptions were discontinued on the same day at the clinic. The patient did not have a prior prescription for either medication. There were no comments in the clinic note that would support the use of either of the prescribed medications (furosemide or potassium). The same prescriptions were sent by the same prescriber to another patient on the same day. The second patient did have previous prescriptions for both lasix and potassium.. There was also a difference in the potassium dose prescribed for the two patients. The medications were never picked up by the patient, but are still on the pharmacy profile and could be re-filled.
   ID 34:
      Furosemide 20mg – take 1 tablet by mouth once daily
      Potassium cl er 10meq – take ½ tablet by mouth daily with food, take while taking Lasix
   ID 35:
      Furosemide 20mg – take 1 tablet by mouth once daily
      Potassium cl er 10meq – take 1 tablet by mouth once daily, take while taking lasix

4. One prescription was transmitted to the pharmacy without any documentation in the patient's medical record. No clinic visit or documentation of a phone call was noted. The patient did not have a previous prescription for the same medication, but had been prescribed similar medication (Detrol LA). A certified medical assistant entered the prescription into the clinic e-prescribing system. The patient did pick up the prescription.
   ID 20: Oxybutynin cl 5mg: take 1 tablet by oral route 1-2 times every day

5. The physician ordered Voltaren 1% gel with directions to "apply (2G) by topical route 4 times every day to the affected area(s)". Pennsaid 1.5% solution was dispensed with directions to "apply 20 drops (10 drops at a time) to affected area 4 times daily as directed as needed".

<u>Discrepancy between Clinic e-Prescribing System and Pharmacy Label</u>

6. The physician's documentation included more detail than what was electronically prescribed by the clinic. The pharmacy's records matched what was electronically prescribed by the clinic. It appears that the additional detail was provided to the patient via telephone.
   ID 47: Amitriptyline HCL 25mg
   Physician Intent (phone record): Amitriptyline 25mg PO daily to take with her 50mg dose for a total daily dose of 75mg
   Clinic EMR & Pharmacy: Take one tablet by mouth every night at bedtime

State HIE Cooperative Agreement

Physicians, other health care providers, and hospitals continued to join NeHII. 157 physicians have signed participation agreements in the first quarter of 2012, 67 in the second quarter of 2012, 131 in the third quarter of 2012, and 80 in the fourth quarter of 2012. A total of 2,662 users and 22 hospitals are currently participating in NeHII, up from 1,950 users and 17 hospitals in the first quarter of 2012.

NeHII was one of the first HIEs to go live with PDMP functionality. Physicians find the functionality to be very useful. Educational sessions for physicians on NeHII's PDMP functionality have been held across the state. Alegent Health, COPIC and NeHII sponsored a PDMP continuing education program on October 8th, 2012 at the McAuley Center on Alegent Health's campus. The PDMP MEU program's goal was to provide physicians with tools to identify and manage potential drug seekers in the clinic and ED settings. One hundred seventeen providers attended the event to hear speakers from the DEA, ED, pain clinics and family practices share their experiences in managing potential drug seekers. The COPIC seminars titled "Facts, Fiction, and Reality: A Multidisciplinary Look at Use, Abuse, and Diversion of Prescription Drugs in Nebraska" were held on October 23rd, 24th, 25th and 30th in Omaha, Lincoln, Kearney and Columbus. A NeHII presentation on PDMP was given at each of the seminars and all were well attended.

eBHIN began rolling out HIE functionality in the summer of 2012 and now has 217 individual HIE users from 11 organizations. Additionally, eBHIN has 264 EHR users and 257 EPM users. Behavioral health consumers are generally supportive of making their health information available to behavioral health providers in other settings through eBHIN. To date, only 10% of behavioral health clients have not opted in to eBHIN.

Expenditures as of Feb. 5, 2012

	Expended	Allocated	% Expended	Balance
NeHII	$4,821,468.49	$4,898,275.00	98%	$76,806.51
State/NITC	$100,598.10	$157,075.00	64%	$56,476.90
Eval/UNMC	$93,313.71	$269,435.00	35%	$176,121.29
eBHIN	$928,359.44	$1,112,275.00	83%	$183,915.56
Pub Health	$79,636.02	$326,500.00	24%	$246,863.98
Telehealth	$70,802.01	$73,620.00	96%	$2,817.99
Total	**$6,094,177.77**	**$6,837,180.00**	**89%**	**$743,002.23**

Executive Summary

The last few years have seen a number of HIOs cease operation or merge with a competitor, effectively closing. Additionally, many industry experts predict that a number of HIOs will be closing or consolidating in the next two years. The literature on HIOs typically faults lack of a sustainable business plan or a lack of valuable services for the closure of HIOs, but these explanations only scratch the surface and are a proxy for deeper level challenges. As HIOs move from directed exchange strategies to query-based exchange, it will be vitally important for them to understand the lessons offered by their predecessors, both successful and failed. In order to dig deeper into the failure of query-based exchanges and provide insights on the roots of success, the Audacious Inquiry (AI) project team examined two HIOs that closed operations and three that consolidated with a stronger competitor.[1] The team interviewed individuals involved with each HIO, including the executive director or CEO where possible. Other interviews were conducted with stakeholders such as former customers, former board members and state or federal government partners. In order to ensure a complete view of the HIOs, every attempt was made to interview at least three individuals who were directly or indirectly involved with the HIO in varying ways. To verify that the findings are generalizable to all HIOs, the project team developed 30 questions that were sent to and completed by six successful HIOs[2] and three of the closed HIOs. Relevant results are included in Appendix B.

While hospitals and providers generally agree that access to clinical data from disparate sources is clinically valuable, their agreement often does not translate into support of an HIO, either through the contribution of data or financial support. Further, recent history suggests that achieving the kind of ubiquitous use among providers or other users that can drive a financial value proposition takes time—and likely more time than HIOs have modeled in their sustainability plans. Still, HIOs must stick with this core mission while also exploring other services that can bring in additional funding to bridge the gap. Stakeholders must see significant value from an HIO in order to be motivated to participate meaningfully. Through our research, we identified four key determinants of value that can push an HIO to its tipping point; the point at which the value becomes self-evident and the services are used on an on-going basis.

- Data Provider Distribution: HIOs must provide enough data from enough stakeholders to make use of the HIO's query functionality valuable for providers who frequently have access to data through hospital portals.
- Data Diversity and Saturation: HIOs must provide more than one type of clinical data and must reach high levels of data availability within the HIO.
- Breadth and Relevance of the User Base: HIOs must identify the right early adopters; those who find value from the available clinical data due to the type of data or the source of the data.
- Utilization Rates: The HIO must reach a high number of queries and/or record returns and reviews in order to demonstrate value.

[1] Closed HIOs include CareSpark. Consolidated HIOs include Minnesota HIE (MN HIE) and Galveston County HIE. Additional HIOs were studied but declined to be included in the public report.

[2] Successful HIOs include: Chesapeake Regional Information System for Our Patients (CRISP), Delaware Health Information Network (DHIN), HealthInfoNet, Indiana Health Information Exchange (IHIE), Michiana Health Information Exchange, and Rochester RHIO.

While these determinants can help an HIO reach its tipping point, there are a number of other factors that influence an HIO's failure or success. HIOs must ensure that the large data stores in their trading area participate not only in the governance of the HIO, but also in data sharing with the HIO. The large data stores will also need to be willing to financially support the HIO and need to be informed of this from the beginning. A factor in getting these data stores involved is having the right organizational leadership that can espouse the benefits of HIE, while ensuring that the promises made are delivered upon. Even with the right HIO leader, an HIO may suffer failure if the state leadership is not supportive of the effort or does not place a high priority on HIE. HIOs that find themselves in such a situation must be quick to show value and continued tangible progress to their stakeholders. They will need to bring services to market quickly, and for query-based services, ensure that clinical data is available shortly after the launch of the HIO. HIOs that lack organizational focus on core goals will struggle to bring relevant services to market and are likely to burn through initial funding creating services that do not provide real value to stakeholders. Finally, HIOs need to be able to innovate and react quickly to market changes; however, most HIOs are hampered in their ability to make changes to their technology platform. Many HIOs do not have the ability to customize or adapt their technologies due to vendor arrangements. These HIOs will be less able to react to market demand or build new innovations without relying on their vendor to have the resources and desire to build the services. All of these factors to a varying degree contribute to an HIO's success or failure.

The United States is still in an early chapter of the history of health information exchange. For HIOs that are in midstream implementing initial technology and spending HITECH dollars, the lessons of earlier successes and failures are instructive and ought not to be ignored. For many, there is an opportunity to take a fresh look at business models, timeframes, and funding commitments before grant funding is fully exhausted.

Appendix B – Comparison of Successful and Unsuccessful HIOs (Data as of June 2012)

	Successful HIEs						Closed HIEs		
	CRISP	**DHIN**	**HealthInfoNet**	**IHIE**	**Michiana HIE**	**Rochester RHIO**	**CareSpark**	**DC RHIO**	**MN HIE**
Total number of users	736	6,368	5,718	6,000 ambulatory and 140,000 inpatient[4]	3,000	3,000	481	380	Less than 500
Number of users querying in last 30 days	70	1,379	1,154	8,807	1,200	1,250	75	40	Volume decreased over last months of the HIO
Average number of queries per month	1548	38,500	3,000	333,333	285,000[5]	30,000	167	960	250
Number of hospitals in trading area	46	8	39	173	20	25	23	13	140
Percent of hospitals with sharing agreement	100%	87%	87%	77%	70%	96%	61%	62%	1.4%
Percent of hospitals sharing clinical data	59%	75%	87%	46%	70%	88%	22%	23%	.7%
Number of unique identities	Over 3.26 million	Over 1.29 million	Over 1.1 million	Over 12.3 million	1.5 million	1.4 million	Over 1.2 million	500,000	4.2 million
Number of labs	Over 11.3 million	Over 18 million	15 million	4.3 billion[6] and 84.5 million text reports	1.152 billion	52 million	Over 1.6 million[7]	500,000	0
Number of radiology results	Over 3.2 million	Over 4.05 million	3.5 million	17.5 million	5 million	7.5 million		300,000	0
Number of immunization records	0	0	8,000	Unknown	800,000	0		75,000	10 million
Number of care summaries	0	Over 7.13 million	1.1 million	2,143,097	200,000	0		0	300,000

[4] IHIE was unable to separate out inactive users, which are included in these numbers

[5] This number includes providers who utilize the EHR that is run on the HIE platform. Each time a provider accesses a patient record for an encounter, the HIE is queried.

[6] This is the total number of clinical results/observations.

[7] CareSpark was not able to specify what types of records were contained in the HIE.

	Successful HIEs						Closed HIEs		
	CRISP	**DHIN**	**HealthInfoNet**	**IHIE**	**Michiana HIE**	**Rochester RHIO**	**CareSpark**	**DC RHIO**	**MN HIE**
Ability to make changes to the HIE technology	Configuration changes only; developing other technologies independently	Configuration changes only	Yes	Yes	Yes	Configuration changes only	No	No	No
Ambulatory practices sending data to the HIO	None	None	Encounters, CPT Codes, Allergies, Immunizations, problem lists, visit notes: 170	Yes	Immunizations: 300 CCD: 50	None	Immunizations, Labs, Medications, Radiology: 8	ADT, Insurance, observations, medications, problem lists, diagnoses, lab results: 7	None
Employ technical resources	Yes	No	6	Regenstrief provides technical resources	8	6	2	0	0
Contract with technical resources	8	Yes	5	No	2 part time	0	12	Number varied	Unknown
Payers part of funding plan	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes
Payers part of HIO founders	No	One payer	Yes	Yes	No	Yes	Yes	Yes	Yes
Number of months between agreement to pursue HIE and deployment of core infrastructure	13	60[8]	10	Unknown	8	10	18	4	14
Number of months between agreement to pursue HIE and first data live	13	60	10	Unknown	12	12	24	2	14
Number of months between agreement to pursue HIE first clinical data live	13	60	10	Unknown	12	12	36	6	14 (med history) 26 (labs, immuni-zations, other)

[8] DHIN was formed in 1997 and decided to pursue clinical exchange in 2003. In 2005 a strategic plan was created and an RFP for HIE infrastructure was released. A vendor was selected and a contract was executed in September 2006, with the infrastructure going live in March 2007.

NeHII Fact Sheet
February 1st, 2013

Latest News

- Blue Cross Blue Shield of Nebraska sponsored a Lunch and Learn Presentation to State Senators and their legislative aides January 28th in Lincoln, NE.
- Deb Bass presented on Prescription Drug Monitoring through NeHII to the Nebraska Board of Pharmacy on January 28th in Lincoln, NE.

NeHII Application for Statewide HIE (Established March 2009)

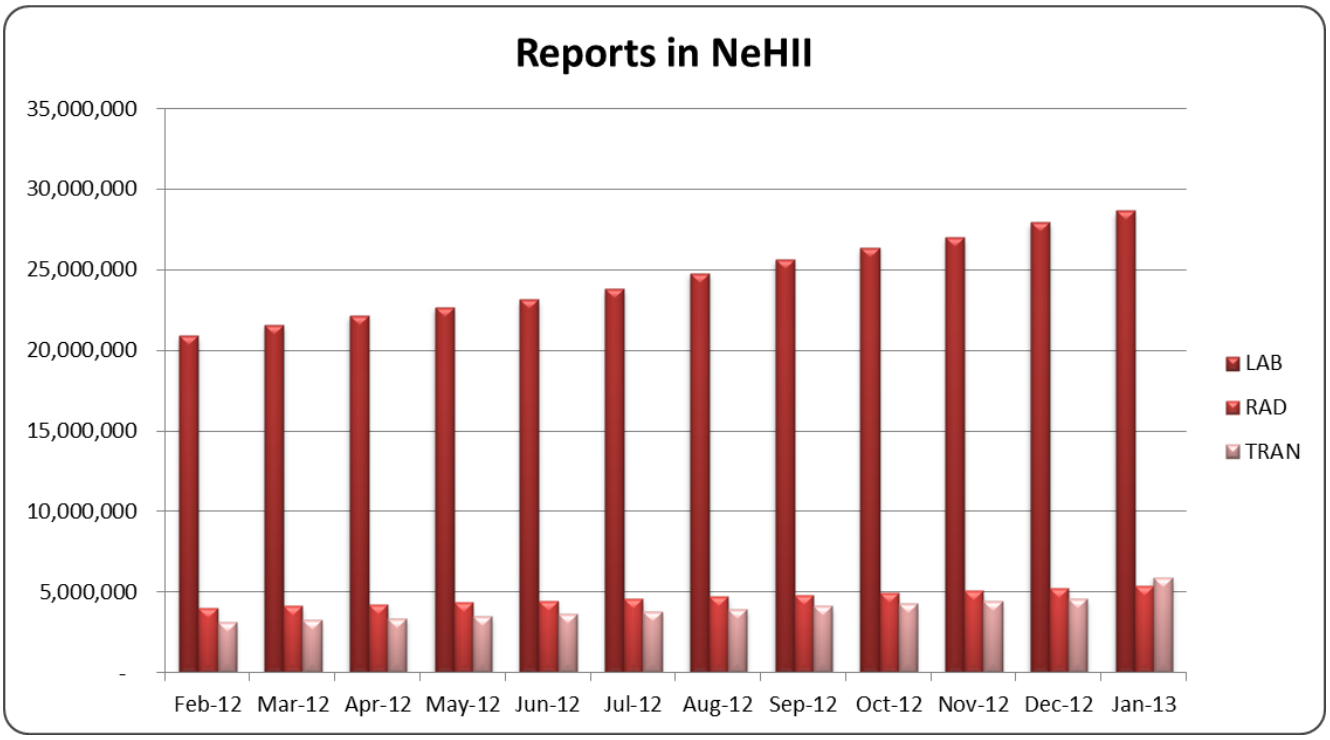
- Based on hybrid federated model
- Facilitates exchange of clinical information via query and clinical messaging functionalities
- 501(c)(3) status received in November 2009
- Uses a HIPAA-compliant opt out platform
- www.nehii.org

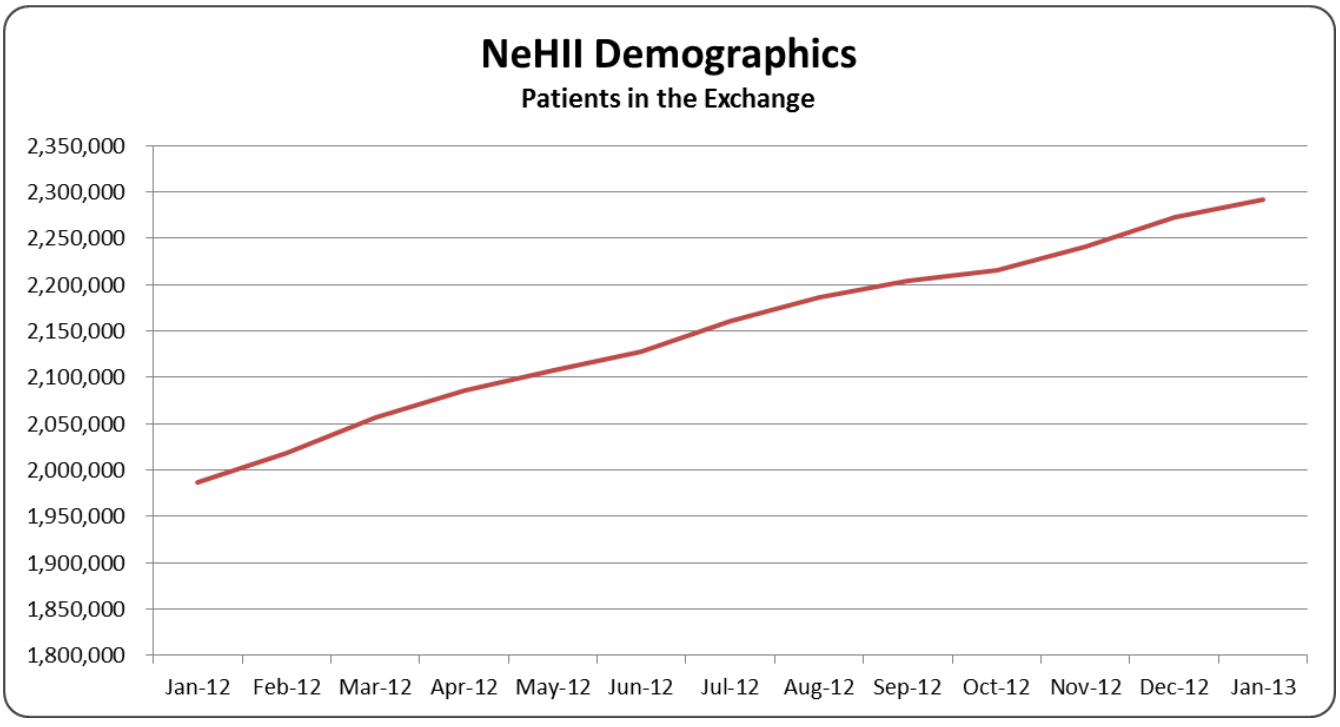
Participant Information

- ***Current Participants***: Alegent Health Hospitals (including Omaha, Papillion, Schuyler, Corning, IA, and Missouri Valley, IA),), Avera Creighton Hospital (Creighton), Avera St. Anthony's Hospital (O'Neill), Children's Hospital and Medical Center (Omaha), Columbus Community Hospital (Columbus), Creighton University Medical Center (Omaha), Great Plains Regional Medical Center (North Platte), Mary Lanning Memorial Hospital (Hastings), Methodist Health System (Omaha), The Nebraska Medical Center (Omaha and Bellevue), Nebraska Spine Hospital (Omaha), Regional West Medical Center (Scottsbluff), Sidney Regional Medical Center (Sidney), and Blue Cross Blue Shield of Nebraska. For a complete list of participants, visit the Participating Providers link on the website
- ***Pending Implementations***: Antelope Memorial Hospital (Neligh Beatrice Community Hospital (Beatrice), Boys Town National Research Hospital (Omaha), Cass County Health System (Atlantic, IA), Chase County Community Hospital (Imperial), Cherry County Hospital (Valentine), Community Hospital (McCook), Community Medical Center (Falls City), Community Memorial Hospital (Syracuse), Garden County Health Services (Oshkosh), Lexington Regional Health Center (Lexington), Montgomery County Memorial Hospital (Red Oak, IA), Myrtue Medical Center (Harlan, IA), Perkins County Health Services (Grant), Plainview Area Health System (Plainview), Providence Medical Center (Wayne), Tri Valley Health System (Cambridge), and York General Hospital (York)

Updated Statistics: February 1, 2013

Patient demographics across the state	**2,292,093**	
• Total patients that have opt out	64,931	2.83%
• Total patients that have opted back in	4,146	6.38%
Provider Information		
• Number of physician providers	1,207	
• Number of healthcare providers	1,577	
Response Time:		
• Percentage of application processes completed in less than 2 seconds		95.73%
Number of results available via the HIE	**42,537,036**	
• LAB	28,462,937	
• RAD	5,858,700	
• Transcription	8,215,399	


Reports in NeHII
35,000,000
30,000,000
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
-
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12
Sep-12
Oct-12
Nov-12
Dec-12
Jan-13
LAB
RAD
TRAN


NeHII Demographics
Patients in the Exchange
2,350,000
2,300,000
2,250,000
2,200,000
2,150,000
2,100,000
2,050,000
2,000,000
1,950,000
1,900,000
1,850,000
1,800,000
Jan-12
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12
Sep-12
Oct-12
Nov-12
Dec-12
Jan-13