Community Betterment Through HIE

"Engaging Community Stakeholders to Create a Sustainable, Large-Scale HIE"

NeHII, Nebraska's Statewide HIE

Montana HIMSS Spring Chapter Meeting

HIE Panel Presentation

May 11, 2016

PRESENTATION OBJECTIVES

- Overview and history of the Nebraska Health Information Initiative (NeHII), Inc.

- Current functionalities of the HIE 1.5 platform

- Future added functionalities of HIE 2.0 and MU

- Successes, challenges, lessons learned

- Contact information

NEHII OVERVIEW

- Statewide query model HIE for Nebraska
- Public/private collaborative 501 (c) 3
- Managed by 16 member Board of Directors
- Exchanging data since Feb. 2009
- Opt out consent model, no "break the glass" options
- 62% of beds in the State connected
- Recipient of 2009 ARRA/HITECH funding
- Partnering with State Medicaid and Division of Public Health
- Moving to Oracle cloud based platform using the Optum HIE 2.0 product

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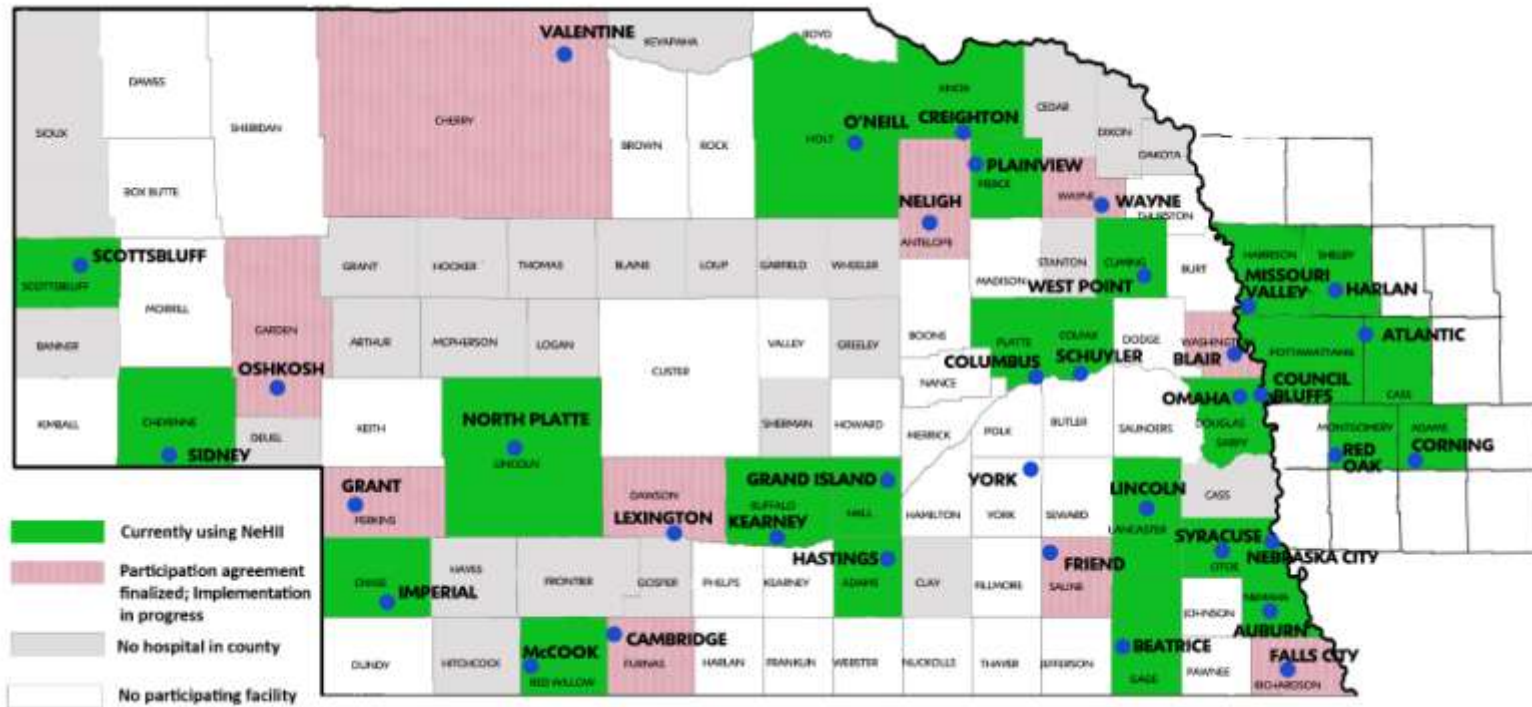# NeHII Statistics (As of April 15, 2016)

- Patients in the System   3,173,381
- Virtual Health Record (VHR) Usage
  - Providers   2,112
  - Staff   3,932
- Percentage of Requests Completed in Less than 2 Seconds   98.8%
- Number of Results Sent to the Exchange   115,811,356
  - LAB   59,301,807
  - RAD   10,833,670
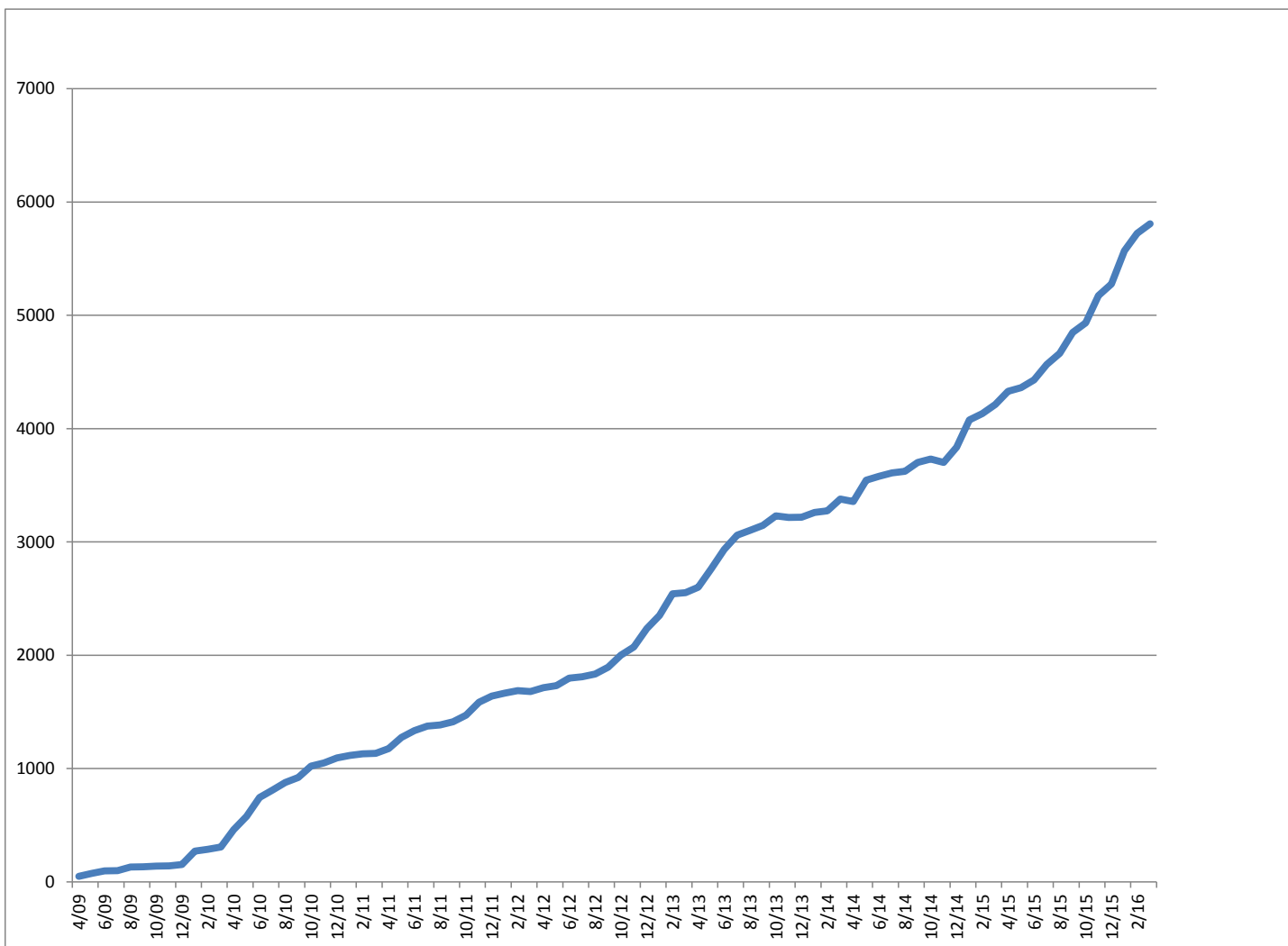 - Transcription   45,675,879

CURRENT NEHII PARTICIPANTS

- CHI Health (AHS)
    - Bergan Mercy, Creighton University Medical Center, Immanuel Hospital, Lakeside Hospital, Nebraska Spine Hospital, Omaha NE
    - Community Memorial Hospital - Missouri Valley, IA
    - Memorial Hospital - Schuyler, NE
    - Mercy Hospital - Council Bluffs, IA
    - Midlands Hospital - Papillion, NE A
    - Nebraska Heart Hospital – Lincoln, NE
    - Plainview Hospital - Plainview, NE
    - St. Francis – Grand Island, NE
    - Good Samaritan – Kearney, NE
    - St. Elizabeth's, Nebraska Heart – Lincoln, NE
    - St. Mary's – Nebraska City, NE
- Avera Creighton Hospital (ACH) - Creighton, NE
- Avera St. Anthony's Hospital (SAH) - O'Neill, NE
- Beatrice Community Hospital & Health Center (BCHHC)- Beatrice, NE
- Boys Town National Research Hospital (BTNRH) - Omaha, NE
- Cass County Health System (CCHS) - Atlantic, IA
- Chase County Community Hospital, Imperial, NE
- Children's Hospital & Medical Center (CHMC) - Omaha, NE
- Community Hospital, McCook, NE
- Columbus Community Hospital (CCH) - Columbus, NE
- Great Plains Health (GPRMC) - North Platte, NE
- Mary Lanning Healthcare (MLMH) - Hastings, NE

- Methodist Health Systems (NMHS)
    - Methodist Hospital - Omaha, NE
    - Methodist Women's Hospital - Omaha, NE
    - Jennie Edmundson - Council Bluffs, IA
- Montgomery County Memorial Hospital (MCMH) - Red Oak, IA
- Myrtue Medical Center - Harlan, IA
- Nebraska Medicine (NMC)
    - University of Nebraska Medical Center - Omaha, NE
    - Nebraska Medical Center - Omaha, NE
    - Bellevue Medical Center - Bellevue, NE
- Nemaha County Hospital (NCH) - Auburn, NE
- Regional West Medical Center (RWMC) - Scottsbluff, NE
    - Regional West Physicians Clinic (RWPC) & FlexiSuite Lab
- Sidney Regional Medical Center (SRMC) - Sidney, NE
- St. Francis Memorial Hospital (FCS) – West Point, NE

Payer/Insurance Companies:

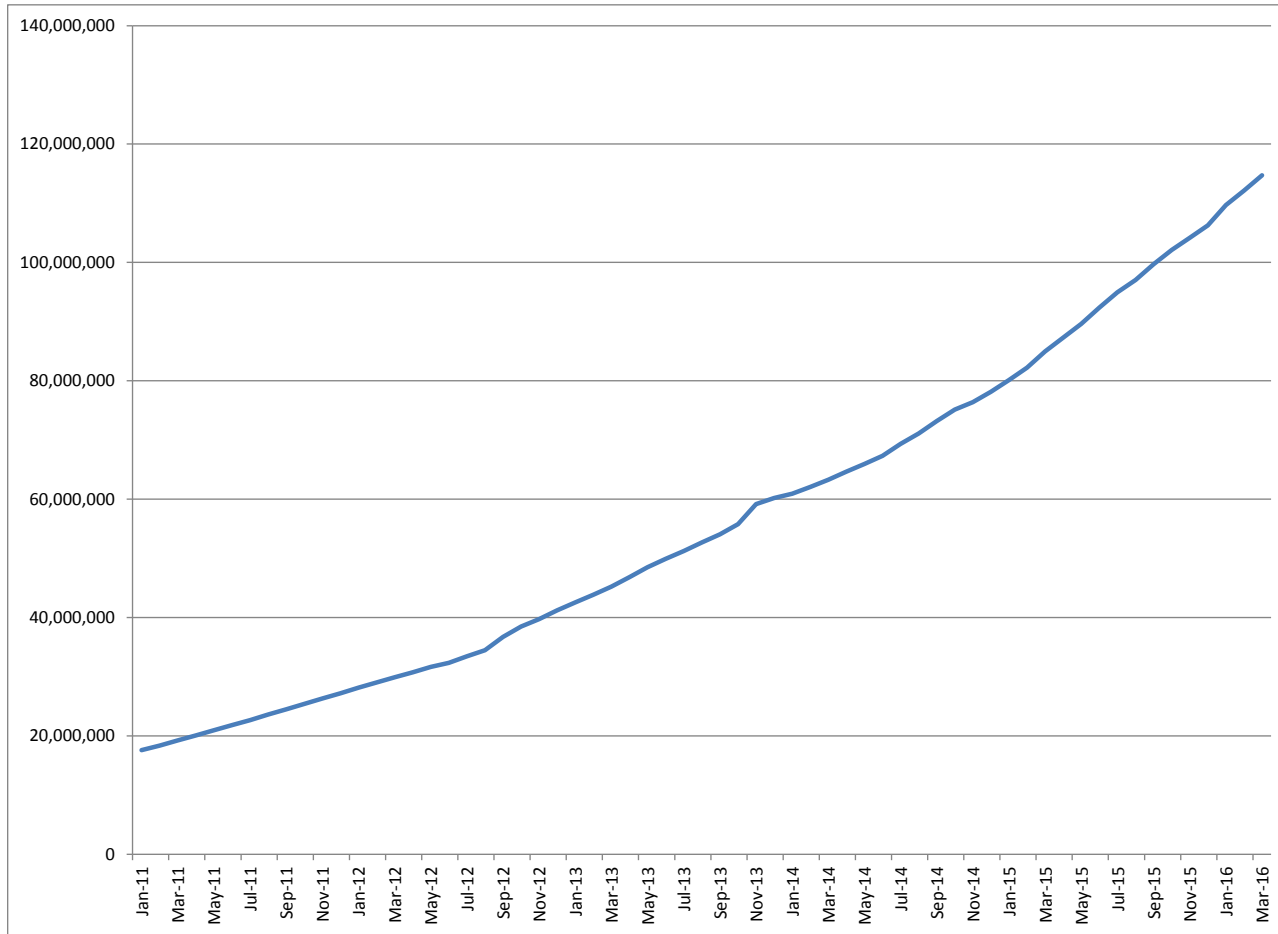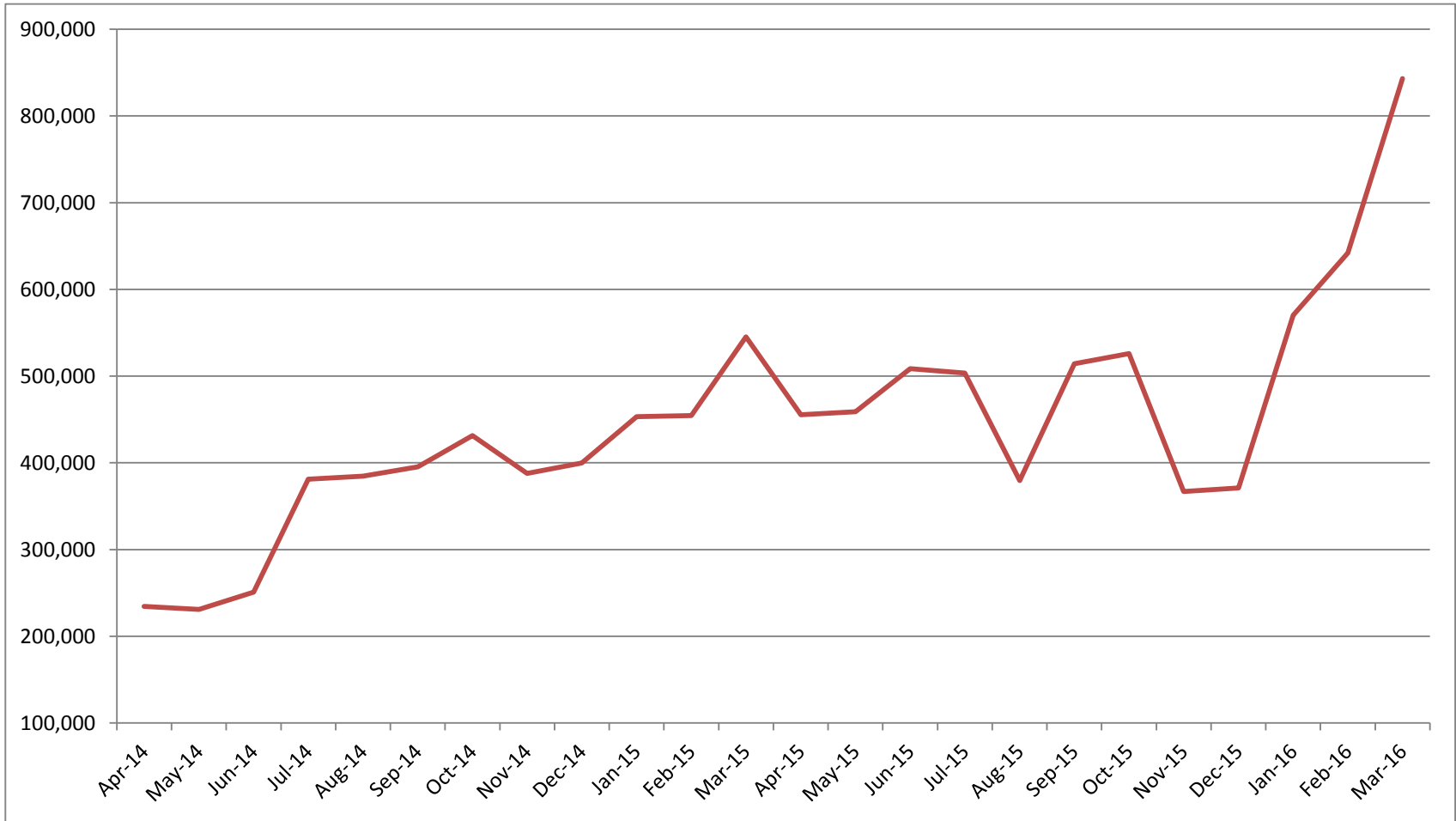- Blue Cross and Blue Shield of Nebraska
- Arbor Health

NEHII ADOPTION

6

NEHII VIRTUAL HEALTH RECORD USERS

TOTAL NUMBER OF RESULTS SENT TO EXCHANGE

TOTAL CLICKS FOR LAST 24 MONTHS

NEHII CONSENT MANAGEMENT

- Opt out platform

- No "Break the Glass" considerations

- Special protected data or 42 CFR Part 2 scrubbed from the ePHI available

- Individual consumer education and consent management processes and support

- Privacy/Security Policies address treatment, payment and healthcare operations

- Secondary use of data for research policy approved Dec. 2014

www.connectnebraska.net

2015 NOTABLE NeHII ACTIVITIES

- Participated in AHIMA national taskforce for information governance principles and maturity model as HIE spokesperson
- 2014 NeHII Annual Report was released
- ONC's Dr. Karen DeSalvo site visit to NE April 23-24
- Development of social media campaign sponsored by BCBSNE
- Expanded single sign-on project implementations – eight in progress
- Joined national association of HIEs called Strategic Health Information Exchange (SHIEC)
- Completed two syndromic surveillance implementations with NE Division of Public Health
- Serve as the HIE Spokesperson on the HIMSS ConCert Committee to support interoperability efforts
- Notified the State of Nebraska/NeHII recipient of ONC Interoperability Grant Award
- Approved Secondary Use of De-identified Data Policy December 2014

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THE STATE'S SUPPORT

- NeHII funded consultant to assist NE Medicaid in writing the IAPD funding request for HITECH 90/10 funding to support HIE efforts in 2012
- $500,000 line item in State budget for FY2013 – 2014 and FY2014 – 2015 to assist eligible hospitals and providers in meeting Meaningful Use requirements
- Currently implementing approved HITECH 90/10 funding from CMS through NE Medicaid IAPD process for:
  - Additional round of adoption support
    - Remaining major health systems
    - Thirty-five CAHs
    - Forty-seven physician practices
    - Seven FQHCs
    - Added functionalities including Public Health Gateway (PHG) pilot and expanded ADT Messaging
- Seize the opportunity at hand with the availability of HITECH 90/10 funding which is available through 2021
- LB 994 – additional $500,000 as pass through to NeHII for operational expenses, received August 29, 2014
- Additional $1 million funding in State budget to support NeHII for next two years

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CURRENT FUNCTIONALITIES

HIE 1.5 Platform

PROJECTS IN PROGRESS

- Added functionality implementations:
  - Readmission reporting to additional facilities
  - Payer admission/discharge reporting
  - Near 'real time' admit/discharge notification service
  - Direct implementations/statewide provider directory
  - PDMP enhancements
  - Public Health Gateway project implementations
  - Single Sign-on implementations
  - Near 'real time' clinical results delivery to third party EMR service
  - HIE 2.0 platform migration
- Future implementations will focus on Critical Access Hospitals and health systems that are eligible for the Medicaid EHR Incentive Program through the 90/10 HITECH funding from CMS and the CDC and Harold Rogers PDMP grant funds

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POPULATION MANAGEMENT / PCMH SUPPORT SERVICES

- **ADT Alerting/Notification Service**
  - For payers, providers and hospitals
  - Notification admits for inpatient stays
  - Notification of Emergency Department visits
  - Notification of discharges

- **Thirty Day Readmission Reporting**
  - Notification when a patient is admitted to a hospital within 30 days of discharge
  - Patient consent and HIPAA considerations

READMISSION REPORTING

- Reporting details
  - Collect admission and discharge information on a 30-day rolling basis
  - Determine readmits within that 30-day timeframe
  - Provide a listing of all readmits to requesting facility
    - Data provided – initial discharge data from the requesting facility and subsequent admission information
    - Opted out patients' information is **never** shared
    - Transport medium – secure encrypted email

SAMPLE READMIT REPORT

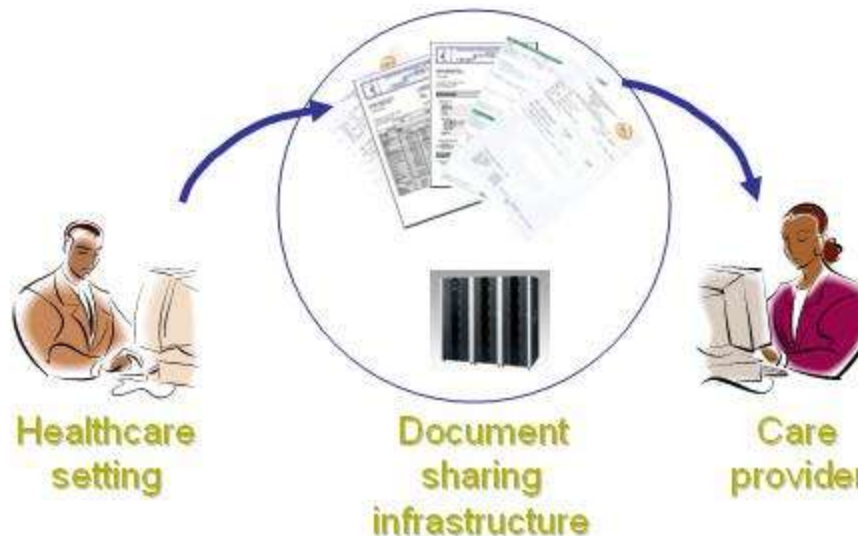| Last Name	First Name	DOB	Discharge Facility	Discharge Timestamp	Discharge MRN	Discharge Patient Class	Discharge Patient Location	Discharge Admission Type	Admit Facility	Admit Timestamp	Admit MRN	Visit Type
MOUSE	MICKEY	2/14/1928	DFH	6/26/2015 0:15	159753	I	DFH7^7FLR	EL	DFH	7/5/2015 7:05	159753	I
FUDD	ELMER	7/11/1948	DFH	7/4/2015 11:15	468219	I	DFH4^4FLR	EL		7/5/2015 6:21		I
RICARDO	LUCY	8/6/1952	DFH	6/21/2015 9:20	258456	I	DFH2^2FLR	ER	DFH	7/5/2015 9:25	258456	I

DIRECT MESSAGING SERVICES

- What is Direct Messaging?
    - Secure encrypted email service that supports electronic communication between healthcare providers and patients
    - Privacy, security, and trust-in-identity controls of Direct exchange are VERY important!
    - Consider HIPAA and the new penalties for breach of privacy.
    - Supports Stage 2 MU objectives related to Transitions of Care and Patient Engagement

DATA EXCHANGE TO PROMOTE COORDINATION OF CARE

Standardized
Continuity of Care
Document

Hospital
LTC
Rehab Facility

Primary Care
Specialty Care
Home Health

Healthcare setting

Document sharing infrastructure

Care provider

"Transition of Care" – The movement of a patient from one setting of care (hospital, ambulatory primary care practice, ambulatory specialty care practice, long-term care, home health, rehabilitation facility) to another.

Integrated Community HIT Plan Toolkit

- Overview

- Potential care partner listing

- Sample engagement letter templates

- NeHII product/services listing

- Detailed product/services descriptions

- Activity listing spreadsheet

- Contact information

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Integrated Community HIT Plan Toolkit (Cont.)

- **Value added service offerings**
  - Virtual Health Record (VHR)
  - Direct messaging
  - Single Sign-on (SSO)
  - Public Health Gateway (PHG) Syndromic Surveillance
  - Immunization Gateway
  - Admit and discharge for payers
  - Readmission reporting
  - Subscription services for admits and discharges

Integrated Community Members

Potential Care Partners

- Home care, hospice and palliative care
- Federally qualified community health centers
- County corrections facility
- County mental health center
- Skilled nursing and rehabilitation facilities
- Dental practices
- Infusion centers
- Primary care practices
- Specialty practices
- Pain Clinics
- Pharmacies
- Durable Medical Equipment Suppliers

- Urgent care centers
- Military bases
- Veteran's Health Administration
- Developmental disabilities support services providers
- Local health departments
- Public health agencies
- Residency programs
- Radiology centers
- Optometrists
- Patients
- Chiropractors
- Dialysis centers
- Ambulatory surgery centers
- Other hospitals
- Major employers
- Others?

FUTURE ADDED FUNCTIONALITIES

OPTUM HIE 2.0 PLATFORM MIGRATION

- Advantages to cloud based offering?
  - Faster deployment & updates
  - Lower cost of ownership
  - Added functionalities
- New terminology
  - Virtual Health Record (VHR) = Community Patient Profile (CPP)
  - Community Patient Index (CPI) = IMS (Patient Identify Management System)
  - Notifications = Patient Event Subscriptions (PES)
  - Provider Directory = Optum Provisioning
- Data exchange format options
  - HL7 and/or C-CDA
- Timeline – "Go live" scheduled for end of June
- OID and new VPN connection - Many thanks to all who have provided their unique object identifier and new connectivity information

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PROJECT TARGET COMPLETION DATES

Start of Data Migration   February 1, 2016

Start of Data Validation   March 14, 2016

HIE Admin Training   March 7, 2016

Data validation complete   June 3, 2016

Go Live on HIE 2.0   June 27, 2016

Added Functionalities Capital Expenditures Budget

- Oct. 2 strategic planning to assist in setting priorities for NeHII's capital expenditures budget
  - **DrFirst medication history functionality (1)**
  - Patient Event Subscriptions (PES) for HIE 2.0 platform
  - Readmission reporting for HIE 2.0 platform
  - **XDS functionality to support C-CDA exchange (3)**
  - **Data analytics (2)**
  - Usage analytics
  - Expanded Public Health Gateway for Syndromic Surveillance
  - **PHR solution for consumer access (4)**
  - **Enhanced PDMP functionality (1)**
  - Mobile messaging for real time automated alerts
  - Participation in Sequoia Project (HealtheWay) and the eHealth Exchange
  - Radiologic image exchange

2016/17 IAPD Funding Requests to CMS HITECH 90/10 Funding

- Funding available through 2021
- Focus on tools that help providers/hospitals meet Meaningful Use
- DrFirst medication history
- Continued comprehensive clinical data
- Rework immunization gateway
- Electronic lab reporting
- Personal health record functionality
- Expanded syndromic surveillance
- Continued hospital/provider adoption activities
- Pertains to only Eligible Hospitals and Eligible Providers
- Does not cover annual ASP fees nor administrative costs

Grant Funding Summary

Federal or State Funding Agency	Solicitation Name/Project Name	Anticipated Award Date	Maximum Award Amount	Period of Performance	Status
National Association of State Controlled Substances Authorities (NASCSA)	Prescription Drug Monitoring Program Enhancement for P:ain Management Providers	August, 2014	$15,000	1 year	Did not receive funding
Office of the National Coordinator for Health Information Technology (ONC)	Advance Interoperable Health Information Technology Services To Support Health Information Exchange	June 12, 2015	$3,000,000	2 years	Nebraska received award of $2,734,000. Funding started July 27, 2015.
Centers for Disease Control and Prevention (CDC)	Prescription Drug Overdose Prevention for States	September 15, 2015	$4,000,000	4 years	Nebraska received award of $771,229 per year. A minimum of 51% of the award will remain with the state. NeHII will receive $350,771/year
Bureau of Justice Assistance, et al	Harold Rogers Prescription Drug Monitoring Program FY2015 Competitive Grant Program	October 1, 2015	$500,000	2 years	Nebraska received the $500,000 award. NeHII will receive $261,00 first year and $248,000 second year.

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ONC Advance Interoperability & Health Information Exchange Grant

- Nebraska funded through July of 2017

- Over $2 million of grant dollars allocated to NeHII

- Match requirement: $1 from recipient for every $3 from the ONC

- NeHII will provide match through personnel time

- Three major milestones: Adoption, Exchange and Interoperability

- Target populations: Eligible Providers/Hospitals, Long Term and Post-Acute Care, and Other Settings and Care Providers (e.g. public health, researchers, reference labs, etc.)

- Opportunity to defray adoption costs and offer new products and services

Financial State of NeHII

- We have made good progress with profitability
- Conducted third annual financial audit and removed "going concern" qualified opinion
- We need to continue to increase revenues by:
  - Adding additional hospitals and providers
  - Adding additional payers, including Medicaid
  - Goal - everyone is a member of NeHII for the betterment of the community - the more members the lower the unit cost and the better the information
- NeHII has $1.6 million line of credit but no draw down on the line currently
- Creation of capital expenditures budget; current list of added functionalities total $1,906,204 annually
- Continue to control expenses

CHALLENGES TO HIE

- Sustainability
- Interoperability blocking
  - Vendor management
  - Interface fees by the EMRs
  - Politics
  - Private HIEs
  - Resource demands
- Governance
- Standards
- Meeting participants at the level of exchange they can accommodate
- Support process workflow change

HIE OPPORTUNITIES

- How large is the circle for health community?
- Population management does not stop at the hospital door
- Analytics from the larger community
- Readmission reporting
- ACO & PHO engagement and offerings
- Patient event subscription services to the provider into the EMR
- Use case approach
- Numbers worked for Nebraska

NEHII SUCCESSES/LESSONS LEARNED

- Sustainability by engaging all the partners

- Delivering State's PDMP offering med rec tool free to all prescribers and dispensers

- Will seek specialized public health registry certification for MU for PDMP

- Securing the grant funding from federal partners

- Building a successful governance model for all participants while partnering closely with the State of Nebraska

- Mandating participation of MCOs in State Medicaid RFP

- Entrepreneurial minded when overcoming the obstacles

THE NEXT 12 MONTHS

- Thank you once again to the payers, providers, hospitals and health systems that have invested heavily in building the exchange to date
- Vendor relationship with Optum critical and greatly improved past 12 months
- Working with other networks such as UniNet to offer value add services
- State's continued support necessary and NeHII must deliver value
- Expanded Medicaid participation, require managed care vendors to participate in NeHII
- Need to achieve 85% participation of hospital beds and four payers
- HITECH 90/10 funding key to next round of adoption and added functionalities
- Consider additional staff to support physician adoption and implementation of added functionalities
- Working with partners to deliver HIT enabled communities for PCMH activities and data analytics using the ONC Interoperability Grant funding
- Migration to HIE 2.0 platform looms large
- Social media campaign kickoff August 17 to raise NeHII awareness with consumers. Please follow NeHII on Twitter: @NeHIIorg
- Oct. 2 strategic planning critical in developing the future roadmap

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NeHII CONTACT INFORMATION

- Dr. Michael Westcott - President, NeHII Board of Directors
- Deb Bass - Chief Executive Officer, NeHII

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