ND CAH Quality Network

North Dakota
Health Information Network

AGENDA

Overview of ND’s Health Information Network
- History
- ND Legislation
- HITAC Participants
- Technical Architecture
  - Direct
  - Health Information Exchange
- Domain Workgroups

Questions
**Information Flow**

**Current Flow**

- Fax
- Mail
- Patient
- Not Available

**Future Flow**

- Electronic Health Records
- Health Information Network
- Secure Exchange of Information

**HITECH Vision**

- Regional Extension Centers
- Workforce Training
- Medicare and Medicaid Incentives and Penalties
- State Grants for Health Information Exchange
- Standards and Certification Framework
- Privacy and Security Framework

- Adoption of EHR’s
- Meaningful Use of EHR’s
- Exchange of Health Information
- Research to Enhance HIT

- Improved Individual and Population Health Outcomes
- Increased Transparency and Efficiency
- Improved Ability to Study and Improved Care Delivery

Source: Celebrating the First Anniversary of the HITECH Act and Looking to the Future (Feb 2010)
**Bending the Curve Towards Transformed Health**

- Data capture and tracking
- Advanced clinical processes and exchange
- Improved outcomes

**2011 - 2013 - 2015**

*Source: Connecting for Health, Markle Foundation "Achieving the Health IT Objectives of the American Recovery and Reinvestment Act" April 2009*

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**2009 Legislative Session**

**Final SB2332 - Passed**

- Establish HIT office within Information Technology Department (ITD)
- Establish HIT Advisory Committee
- Hire HIT Director who will work under the direction of the Advisory Committee
  - **Appropriation - $350,000**
- Establish an electronic health information exchange fund
  - **$8 million** made available to be used for the required match for State grant opportunities
- Establish a revolving loan fund NOT tied to the stimulus funds

*Source: NDHIN*
2011 HIT Legislation

- Funding for 3 FTE for state HIT Office within ITD (HIN Technical Manager, HIN Trainer and HIN technical/security/privacy)
- Renew – ($5 million) State Loan Program plus an additional $5 million
- Continue – ($8 million) for required federal match and operating the HIE
- Changes to HITAC

Health Information Technology Advisory Committee
*Chair-Lisa Feldner, CIO State of North Dakota, Information Technology Department
*Vice-Chair-Lynette Dickson, Associate Director Center for Rural Health, UND School of Medicine and Health Sciences
*Barb Grount, CEO North Dakota Healthcare Review
Courtney Koebele, Director of Advocacy North Dakota Medical Association
*Caryn Hewitt, CIO Sanford Health System, Fargo
*Dan Kelly, CEO McKenzie County Healthcare System
Dave Molmen, CEO Altru Health System/Chair Hospital Association
Janis Cheney, Executive Director AARP
Jennifer Witham, IT Director North Dakota Department of Human Services
Jerry Jureen, President North Dakota Healthcare Association
Jim Long, CEO West River Health Systems
Jon Rice, MD Consumer Representative
Laurie Peters, RHT, Past-President North Dakota Health Information Management Assoc.
Lisa Clute, Executive Officer First District Health
* Tony Tardugno, CIO BCBS of North Dakota
*Nancy Willis, Medicaid HIT Coordinator NDDHS-ITS
Neil Frame, Operations Director Metro Area Ambulance
Representative Robin Weisz North Dakota Representative
Senator Judy Lee North Dakota Legislature
Shelly Peterson, President Long-term Care Association
Tami Wahl, Sr. Policy Advisor-HHS Governor’s Office
Laurie Dewille, MD, State Health Officer North Dakota Department of Health
Todd Berth, Director of Information Systems, St. Alexius Medical Center
*Executive Committee
**MISSION**
Advance the adoption and use of technology to exchange health information and improve healthcare quality, patient safety and overall efficiency of healthcare and public health services in North Dakota.

**VISION**
Quality Healthcare for all North Dakotans – Anywhere, Anytime.

*Website:* [www.healthit.nd.gov](http://www.healthit.nd.gov)
Phased Implementation

- Phase 1
  - Implement NDHIN Direct

- Phase 2
  - Connect large data providers to HIE
  - Begin rollout of Virtual Health Record (VHR) and other services

- Phase 3
  - Rollout exchange statewide

Direct Overview

- Many states are leveraging Direct to rapidly enable directed health information exchange to support Meaningful Use

- The Direct Project is a transport solution, not a content solution

- It specifies a set of standards and services, that with a policy framework, enable simple, directed, routed, scalable transport over the Internet to be used for secure and meaningful exchange between known participants
Using the Direct Project

Direct can be used by:
- Providers
- Members of the care team
- Labs
- Patients

Direct can be incorporated into:
- Electronic Health Records
- Email Clients
- Web Portals
- Health Information Exchanges

What can be sent with Direct?

- Unstructured Data
  - Text documents, PDF, Images

- Semi-Structured Data
  - HL7 Message String

- Structured Data
  - CCD or CCR
Use Cases

- Exchanging information with:
  - Providers
    - Hospitals
    - Labs
    - LTC
  - Payors
    - BCBS ND
    - Medicaid
  - Coding Consultants
  - WSI
  - Patients

- What are you faxing? To who?
- Where are you sending charts?

NDHIN Update

- 58 Signed Participation Agreements
- 3 Pending
- 297 Authorized Users
- ONC’s Approval to move to Phase 2 (query-based services)
  - Connect large data providers to HIE
  - Begin rollout of Virtual Health Record (VHR) and other services
### Participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Principal Contact</th>
<th>Participant</th>
<th>Principal Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergy and Asthma Care Center</td>
<td>Dan Dalan</td>
<td>ND Department of Health</td>
<td>Darin Meschke</td>
</tr>
<tr>
<td>American Healthways Services, LLC</td>
<td>Jim Carroll</td>
<td>ND Dept of Human Services</td>
<td>Pam Anderson &amp; Nancy Willis</td>
</tr>
<tr>
<td>Aneta Parkview Health Center</td>
<td>Stephanie Carlson</td>
<td>ND Early Hearing Detection and Intervention</td>
<td>Jerusha Olthoff</td>
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<tr>
<td>Ashley Medical Center</td>
<td>Linda Pejelle</td>
<td>Nelson County Health System</td>
<td>Steve Forde</td>
</tr>
<tr>
<td>Bethel Lutheran Nursing &amp; Rehab Center</td>
<td>Cindy Sorensen</td>
<td>North Dakota Health Care Review, Inc</td>
<td>Jonathan Gardner</td>
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<tr>
<td>Bismarck-Burleigh Public Health</td>
<td>Nicole Williams</td>
<td>North Dakota Long Term Care Association</td>
<td>Pamela Thompson</td>
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<tr>
<td>Carrington Drug, Inc</td>
<td>Matthew Paulun</td>
<td>Center</td>
<td>Chris Kjorven</td>
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<tr>
<td>Cavalier County Health District</td>
<td>Terri Gustafson</td>
<td>PACE (Bismarck)</td>
<td>Tim Cox</td>
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<tr>
<td>Central Avenue Pharmacy Inc</td>
<td>Doreen Snyder</td>
<td>PACE (Dickinson)</td>
<td>Tim Cox</td>
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<tr>
<td>Central Pharmacy Inc</td>
<td>Shane Wendel</td>
<td>PK Consulting</td>
<td>Patti Kritzberger</td>
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<tr>
<td>Central Valley Health District</td>
<td>Robin Izler</td>
<td>PR Health Corporation</td>
<td>Rick Amundrud</td>
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<tr>
<td>Coal Country Community Health Center</td>
<td>Megan Voeller</td>
<td>Prairie Assisted Living Services</td>
<td>Cheryl Rising</td>
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<tr>
<td>Cooperstown Medical Center</td>
<td>Gregory Stump</td>
<td>Presentation Medical Center</td>
<td>Sheri Lewis</td>
</tr>
<tr>
<td>Carter Health</td>
<td>Keith Johnson</td>
<td>Professional Pharmacy Inc</td>
<td>Curtis McGarvey</td>
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<td>Essentia Health</td>
<td>Andy Kester</td>
<td>Richland County Health Department</td>
<td>Debra Flack</td>
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<tr>
<td>Family HealthCare Center</td>
<td>Cathy Wasson</td>
<td>Sakakawea Medical Center</td>
<td>Pam Fitzgerald</td>
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<tr>
<td>Golden Acres Manor</td>
<td>Bobbi Ferguson</td>
<td>Southwest Healthcare Services</td>
<td>Roberto Alvarez &amp; Becky Hanson</td>
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<tr>
<td>Great Plans Women’s Health Center, PC</td>
<td>Leland Tong</td>
<td>St. Aloisius Medical Center</td>
<td>Marian Hase</td>
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<tr>
<td>Hill Top Home of Comfort, Inc</td>
<td>Greg Armitage</td>
<td>St. Andrews Health Center</td>
<td>Jeff Ostadahl</td>
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<tr>
<td>IMA Healthcare</td>
<td>Kathy Barrows</td>
<td>St. Catherine’s Living Center</td>
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<tr>
<td>Jacobson Memorial Hospital Care Center</td>
<td>Tom Robinson</td>
<td>Steiners Pharmacy</td>
<td>Neil Steiner</td>
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<tr>
<td>Jamestown Regional Medical Center</td>
<td>Jeremy Schiede</td>
<td>Tioga Health</td>
<td>Ann Nelson</td>
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<tr>
<td>Knife River Care Center</td>
<td>Alice Grinstein</td>
<td>Traill District Health Unit</td>
<td></td>
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<tr>
<td>Linton Hospital</td>
<td>Corey Silvernagel</td>
<td>Valley Community Health Centers</td>
<td>Stacey Jacobson</td>
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<td>Luther Memorial Home</td>
<td>Julie Winger</td>
<td>Wahalla Prescription Shop, Inc</td>
<td>Spencer Chaimont</td>
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<td>Maple Manor Care Center</td>
<td>Jim Schallert</td>
<td>Walsh County Health District</td>
<td>Donna Holand</td>
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<td>Marian Manor Healthcare Center</td>
<td>Sharon Mornn</td>
<td>West River Health Services</td>
<td>Sue Miller</td>
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<td>McKenzie County Healthcare Systems, Inc</td>
<td>Nate Thibodeau</td>
<td>Western Horizons Living Centers</td>
<td>Scott Wheeler</td>
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<tr>
<td>Medcenter One Health System (Sanford Bismarck Region)</td>
<td>Sharon German</td>
<td>Wishek Home for the Aged</td>
<td>Gregory J. Saheei</td>
</tr>
<tr>
<td>Midgarden Family Clinic, PC</td>
<td>Cynthia Udby</td>
<td>Wishek Hospital Clinic Association</td>
<td>Kari Buchholz</td>
</tr>
<tr>
<td>Mountrail County Health Center</td>
<td>Doris Brown</td>
<td></td>
<td></td>
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</table>
NDHIN Direct

- www.ndhin.org
  - Enrollment Process
  - Direct Login link
- Direct User Group
- “Direct Dispatch” newsletter

- Driving Use Cases!

Phased Implementation

- Phase 1
  - Implement NDHIN Direct
- Phase 2
  - Connect large data providers to HIE
  - Begin rollout of Virtual Health Record (VHR) and other services
- Phase 3
  - Rollout exchange statewide
Virtual Health Record (VHR)

- Provides authorized users with a patient’s comprehensive health record any time, any place, through a secure browser regardless of the type of EHR and data standards that are employed at each facility.
- Quicker care assessment
- Immediate reflection of current prescriptions, problems, allergies, test, and more.

User Access Levels

<table>
<thead>
<tr>
<th>Level</th>
<th>Role Description</th>
<th>Access Level</th>
<th>Required Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>VHR Admin</td>
<td>Full VHR access</td>
<td>This will be select NDHIN staff and possibly select individuals at each facility/organization in the future.</td>
</tr>
<tr>
<td>Level 2</td>
<td>Providers – Doctors, NPs, PAs (have NPI, DEA or prescription license numbers) including specialist such as Optometry, Dentist, Chiropractic, etc.)</td>
<td>Full VHR access</td>
<td>All clinical info plus query functionality</td>
</tr>
<tr>
<td>Level 3</td>
<td>Licensed Professionals – RNs, LPNs, MAs (not licensed to write prescriptions)</td>
<td>Full VHR access</td>
<td>All clinical information plus Surescripts query functionality only</td>
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<tr>
<td>Level 4</td>
<td>Receptionists, HIMs, Nurse Assistants</td>
<td>Limited VHR access</td>
<td>Patient demographics, consent, advance directives, payer information. Do they need to see any of the tabs i.e. cumulative labs, radiology, reports, ADT?</td>
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<tr>
<td>Level 5</td>
<td>Pharmacy</td>
<td>Limited VHR access</td>
<td>Insurance eligibility, pharmacy benefits, med &amp; allergies, problem list. Do they need to see any of the tabs i.e. cumulative labs, radiology, reports, ADT? Do they need any query functionality?</td>
</tr>
<tr>
<td>Level 6</td>
<td>Payers</td>
<td>Limited VHR access</td>
<td>Insurance eligibility. Should problem list be available? Do they need to see any of the tabs i.e. cumulative labs, radiology, reports, ADT?</td>
</tr>
</tbody>
</table>

http://www.healthit.state.nd.us/members/domainworkgroups/clinical/vhr-user-access-discussion/
### Vaccinations

<table>
<thead>
<tr>
<th>Date</th>
<th>Drug Name</th>
<th>Dose</th>
<th>Route</th>
<th>Lot</th>
<th>Rx By</th>
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<tbody>
<tr>
<td>05/06/12</td>
<td>Pneumococcal Vp PpV</td>
<td>0.5 mL</td>
<td>SC</td>
<td>0123</td>
<td></td>
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<tr>
<td>05/06/12</td>
<td>Tetanus Diphtheria</td>
<td>0.5 mL</td>
<td>SC</td>
<td>12345</td>
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</tr>
<tr>
<td>06/27/12</td>
<td>Influenza Vaccine</td>
<td>3 mL</td>
<td>SC</td>
<td>54321</td>
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</table>

### Encounters

There is no encounter information available for this patient.

### Providers

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Relationship</th>
<th>Workgroup / Practice</th>
<th>Office Phone Number</th>
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</thead>
<tbody>
<tr>
<td>05/10/2012</td>
<td>Regis Jackson</td>
<td>Consulting Provider</td>
<td>Test One Workgroup</td>
<td>650-555-6700</td>
</tr>
<tr>
<td>07/10/2012</td>
<td>Doctor Smith</td>
<td>Consulting Provider</td>
<td>Test One Workgroup</td>
<td>650-555-6700</td>
</tr>
<tr>
<td>04/05/2012</td>
<td>Dr. John Doe</td>
<td>Consulting Provider</td>
<td>Dr. PCP Workgroup</td>
<td>650-555-7891</td>
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<tr>
<td>07/10/2012</td>
<td>Dr. Jane Smith</td>
<td>Consulting Provider</td>
<td>Dr. PCP Workgroup</td>
<td>650-555-7891</td>
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### Inactive Providers

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<tr>
<th>ID</th>
<th>Name</th>
<th>Relationship</th>
<th>Workgroup / Practice</th>
<th>Office Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>04/05/2012</td>
<td>Robert Smith</td>
<td>Consulting Provider</td>
<td>Demo Shared Workgroup</td>
<td>650-555-7891</td>
</tr>
<tr>
<td>07/10/2012</td>
<td>Henry Smith</td>
<td>Consulting Provider</td>
<td>Dr. PCP Workgroup</td>
<td>650-555-7891</td>
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### Contacts

<table>
<thead>
<tr>
<th>Date</th>
<th>Relationship</th>
<th>Name</th>
<th>Phone Number</th>
<th>Email</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/01/2012</td>
<td>Daughter</td>
<td>Mary Doe</td>
<td>650-555-6700</td>
<td><a href="mailto:mary@example.com">mary@example.com</a></td>
<td></td>
</tr>
<tr>
<td>03/10/2012</td>
<td>Guardian</td>
<td>John Doe</td>
<td>650-555-6700</td>
<td></td>
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### Advance Directives

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<tr>
<th>Created On</th>
<th>Effective On</th>
<th>Patient</th>
<th>Relationship</th>
<th>Status</th>
<th>Reported By</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/01/2012</td>
<td>05/01/2012</td>
<td>Living Will</td>
<td>Dr. PCP</td>
<td>Current and Verified</td>
<td>D. PCP</td>
</tr>
<tr>
<td>06/27/2012</td>
<td>06/27/2012</td>
<td>Durable Power of Attorney</td>
<td>Dr. PCP</td>
<td>Verified with Fiduciary</td>
<td>D. Smith</td>
</tr>
<tr>
<td>07/10/2012</td>
<td>07/10/2012</td>
<td>Living Will</td>
<td>Dr. PCP</td>
<td>Current and Verified</td>
<td>D. PCP</td>
</tr>
</tbody>
</table>
**Advance Directive Repository**

- Maintain an AD Repository allowing for access, addition, update and deletion of advance directives so an individual, or their agent, will have access to add, change, or delete an advance directive
  - Initial Load
  - EdgeServer
  - Provide as an embedded document (PDF) via HL7
    - Send via Direct
- Available in VHR Patient Summary

**Immunization Gateway**

- Build bi-directional interface between the NDHIN and the ND Immunization Information System (NDIIS)
  - Immunizations available for real-time query via the NDHIN Virtual Health Record
  - NDHIE will accept and route VXU messages from participating entities to the NDIIS
Personal Health Record (PHR) Gateway

- NDHIN will enter into agreement with Microsoft HealthVault
  - PHR Gateway will facilitate data exchange between the NDHIN and MS HealthVault
  - Patients that have HealthVault accounts can receive copies of their medical records
    - Hospitals
    - Out-Patient Clinics
    - Labs
  - Other PHRs
- Statewide effort to collaborate on a ND PHR

Public Health Reporting Service

- De-identified syndromic surveillance results
- Electronic Lab Reporting
Current HITAC Domain Work Groups

- Finance – Chair, Tim Blasl
- Technical – Co-Chairs, Craig Hewitt and Chad Peterson
- Communication & Education – Chair, Laurie Peters
- Clinical – Co-Chairs, Lynette Dickson & Dr. David Hanekom
- Policy – Co-Chair, Nancy Willis & Jenny Witham
- Consumer – Part of Communication & Education
- Data – Initial Meeting Set for October 10, 2012

Questions?

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  rvesey@nd.gov
  701-328-2588
- Tina Gagner
  ND HIN Business Analyst
  tgagner@nd.gov
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- Sheldon Wolf
  shwolf@nd.gov
  701-328-1991
  http://www.healthit.nd.gov/