

**eHealth Council**  
**January 11, 2011**  
**9:30 PM CT – 12:00 PM noon CT**

Lincoln: Nebraska Educational Telecommunications, 1800 N. 33rd, Board Rm., 1st Floor  
Omaha: UNMC, Swanson Hall, Room 2065\*

UNMC map at [http://www.unmc.edu/publicrelations/docs/UNMC\\_BW\\_map.pdf](http://www.unmc.edu/publicrelations/docs/UNMC_BW_map.pdf)

Hebron: Thayer County Health Services

Kearney: Good Samaritan Hospital

North Platte: Great Plains Regional Medical Center

\*Contact Anne Byers [anne.byers@nebraska.gov](mailto:anne.byers@nebraska.gov) or 402 471-3805 for directions to the UNMC site

Meeting Documents: Click the links in the agenda or click here for [all documents](#) (not including [Strategic](#) and [Operational](#) eHealth Plans\*)

## Tentative Agenda

<b>9:30</b>	Roll Call Notice of Posting of Agenda Notice of Nebraska Open Meetings Act Posting <b>Approval of <a href="#">September 13, 2010 minutes</a>*</b> Public Comment
<b>9:40</b>	Membership <ul style="list-style-type: none"><li>• <b>Renewals*</b></li><li>• <b>New Members*</b></li></ul>
<b>9:45</b>	<b>Endorsement/Affirmation of the <a href="#">Strategic</a> and <a href="#">Operational</a> eHealth Plans*</b>  ONC Requirements <ul style="list-style-type: none"><li>• Continuity of Care and Provider Directory Timeline</li></ul> <b>Setting State HIE Goals for Connections for:</b> <ul style="list-style-type: none"><li>• <b>Pharmacies*</b></li><li>• <b>Labs*</b></li><li>• <b>Health Care Providers (including behavioral health, public health, and health plans)*</b></li></ul> Updating the Strategic and Operational eHealth Plans <ul style="list-style-type: none"><li>• Draft Outline</li><li>• Updated Guidance from ONC</li></ul> Challenge Grant Application

	<p>Updates from Related Initiatives</p> <ul style="list-style-type: none"> <li>• NeHII</li> <li>• eBHIN</li> <li>• Nebraska Statewide Telehealth Network</li> <li>• SENHIE</li> <li>• Medicaid</li> <li>• Wide River TEC</li> <li>• Metropolitan Community College</li> <li>• OneWorld Community Health Center</li> <li>• Broadband Grants—NebraskaLinc and Nebraska Library Commission</li> <li>• Broadband Mapping and Planning</li> </ul> <p>Updates on ONC Priority Areas</p> <ul style="list-style-type: none"> <li>• Lab Reporting</li> <li>• e-Prescribing</li> <li>• Summary Care Document</li> <li>• Provider Directory</li> <li>• Public Health</li> </ul>
<b>12:00</b>	<b>Adjourn</b>

Meeting notice posted to the NITC and Public Meeting Website on Dec. 22, 2010. The agenda was posted on Jan. 6, 2011, 2010.

\* Indicates action items.

**EHEALTH COUNCIL**  
September 3, 2010, 1:30-4:00 p.m.  
Nebraska Educational Telecommunications, Board Room  
1800 N. 33rd Street, Lincoln  
**PROPOSED MINUTES**

**MEMBERS PRESENT**

Wende Baker  
Joyce Beck  
Pat Darnell, Alternate for Vivianne Chaumont  
Donna Hammack  
Jeff Kuhr  
Ken Lawonn  
Sue Medinger  
Greg Schieke  
Lianne Stevens  
September Stone  
Steve Urosevich  
Delane Wycoff

**MEMBERS ABSENT:** Susan Courtney, Joni Cover, Joel Dougherty, Senator Annette Dubas, Congressman Jeff Fortenberry, Kimberly Galt, Alice Henneman, Harold Krueger, Kay Oestmann, John Roberts, Nancy Shanks

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

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

Dr. Wycoff called the meeting to order at 1:35 p.m. The meeting notice was posted to the Nebraska Public Meeting Website and the NITC Website on August 16, 2010. The meeting agenda was posted on September 8, 2010. A copy of the Nebraska Public Meeting Act was posted on the west wall. Twelve members were present at roll call.

**APPROVAL OF MAY 13, 2010 MINUTES**

**Ms. Baker moved to approve the [May 13, 2010 minutes](#) as presented. Ms. Hammack seconded. All were in favor. Motion was carried by unanimous voice vote.**

**PUBLIC COMMENT**

There was no public comment.

**MEMBERSHIP—ELECTION OF CO-CHAIR**

The election of co-chair was tabled until final approval of new member Marsha Morien.

**MEMBERSHIP—NEW MEMBER NOMINATION**

Steve Henderson and Keith Mueller have recently resigned from the eHealth Council. Marsha Morien has agreed to serve as a member.

**A motion was made to approve Marsha Morien's nomination. All were in favor. Motion carried.**

**UPDATES - EHEALTH PLANS--** Anne Byers

Revised [Strategic](#) and [Operational eHealth Plans](#) have been sent to the Office of the National Coordinator. The latest revisions include additional information on structured laboratory results, e-prescribing and state-level provider directory. The revised plans as well as a summary of revisions have been posted on the NITC website.

**UPDATES – NEHII--Ken Lawson**

There are over 1.6 million patients in the NeHII Master Patient Index. Approximately 183 physicians and staff are using the EMR and over 900 are accessing the virtual health record. Feedback from physicians and staff has been positive.

**UPDATES – EBHIN--Wende Baker**

SNBHIN has changed its name to eBHIN (Electronic Behavioral Health Information Network). The project is expanding to include Region I in the Panhandle. Janelle Fricke is the new project manager. She has been working on training for the implementation of the system. The selection of a vendor to relocate the center is in the final stages. eBHIN has also been working on specifications for equipment for the center. Once the specifications have been developed, an RFP will be released within the next 30-60 days. Providers are excited about the electronic services that will be available.

**UPDATES – MEDICAID--Pat Darnell**

Public Consulting Group was the vendor selected to assist with the State Medicaid HIT plan. A kickoff meeting is scheduled for tomorrow to plan the 6-month project.

**UPDATES - WIDE RIVER TEC--Greg Schieke**

Approximately thirty-five (35) vendors responded to the RFI. The main focus has been on recruiting clinics to sign up. The \$2,000 fee would be waived if clinics accepted their standard agreement and would sign on. There has been great interest. The promotional offer ends this Friday. Lt. Governor Sheehy will be at the kickoff event tomorrow in Lincoln at the Embassy Suites from 7 a.m.-7 p.m. which will include breakout sessions. Twenty-six vendors will be there to display their products. There are planned several scenarios for them to demonstrate their products. More information and sign-up is available via their website. On Friday, it was announced that the project has received funding to assist critical access hospitals. The Advisory Council will be meeting tomorrow. The project plans to work with the Public Policy Center and Nancy Shank on a curriculum development project.

**UPDATES - METRO COMMUNITY COLLEGE--Anne Byers**

Metro Community College has received a coalition training grant from ARRA/HHS to provide HIT training for the entire state of Nebraska. Classes began last Tuesday with already over 100 enrolled. There is a lot of interest in the program. They are the first in the region and possibly in the country providing this type of course.

**UPDATES - ONEWORLD COMMUNITY HEALTH CENTER--Joel Dougherty**

Mr. Dougherty was not present to report.

**UPDATES - TELEHEALTH NETWORK, Donna Hammack**

When the state's revised health plan is approved, it will help with the project to move forward with the peripherals for state hospitals to improve clinical usage of telehealth. The Nebraska Statewide Telehealth Network 2010 Conference "Present Challenges, Future Hope" was held in the Omaha on July 23-23. Dr. Blumenthal was a keynote speaker. Approximately 145 persons attended. Physicians were encouraged to meet and speak with Dr. Blumenthal.

## **UPDATES - BROADBAND GRANTS, NEBRASKALINK AND NEBRASKA LIBRARY COMMISSION--** Anne Byers

Recipients of State HIE Cooperative Agreements are required to coordinate with other federal grantees in the state, including recipients of broadband grants. NebraskaLink received approximately 11.5 million to offer affordable middle-mile broadband service in communities across the state. The Nebraska Library Commission received approximately \$2.4 million to upgrade broadband access and to add/upgrade computers in many of the state's libraries. Computer literacy training will be provided at participating libraries.

## **UPDATES - BROADBAND MAPPING AND PLANNING--** Anne Byers

The Public Service Commission has surveyed households and service providers. The survey indicated that 76% of Nebraska households prescribe to broadband. The public map may not be available until the spring. There is also a regional planning portion of the grant as well. The Public Service Commission will be working with the NITC's Community Council to assist with the planning. Delays in releasing the broadband map have pushed back the start of the regional forums. Members were asked to contact Ms. Byers if broadband availability in any community is identified as an issue for health care providers.

## **ONC/NEBRASKA PRIORITY AREAS--** Anne Byers

The Office of the National Coordinator is asking states to provide more in-depth information regarding the following areas:

- **Structured Lab reporting.** Hospitals and independent labs are to report their findings electronically. Report formats differ widely and there are a lot of different designs. The issue is to how to assure that the receipt of results is intact so that it is easy to read and has not changed as it goes through the exchanges. In July, Axolotl announced that they will support PDF capability.
- **E-prescribing.** There are still some issues related to e-prescribing that should be addressed, including issues related to e-prescribing Schedule II drugs. Discussion occurred regarding the formation of a work group. Ms. Beck said that she would be happy to serve on the committee. It was suggested to start with the same group that was established before and see if anyone else would be interested.

**Ms. Beck moved to establish an e-Prescribing Work Group. Ms. Baker seconded. All were in favor. Motion carried by unanimous voice vote.**

- **Summary Care Document.** It is unclear as to what should be included in a summary care document, what data makes sense, and how much data is enough or too much. Members expressed some concern that the summary care document may be used as a transition document from one care area to another with differing information needs. After discussion, it was decided to postpone the formation of a work group at this time.
- **Provider Directory.** States are required to develop a statewide provider directory. The Council will need to continue to work on this as part of the universal portal concept. The Health Professions tracking service was suggested as a good possible resource.
- **Public Health.** Ms. Byers announced that weekly discussions and meetings have been occurring to plan connections with NeHII and the state's immunization registry and the Nebraska Electronic Disease Surveillance System.

## **PROCESS FOR UPDATING THE STRATEGIC AND OPERATIONAL EHEALTH PLANS,** Anne Byers

Although the plan has not been approved by the Office of the National Coordinator, the State of Nebraska is required to submit an updated plan by March 15, 2011. Only 6 out of 56 state plans have been approved. Nebraska's vision and mission will likely need changes. It is anticipated that sections of the plan will need to be updated beginning in January.

**ADJOURN**

With no further business, Dr. Wycoff adjourned the meeting at 3:10 p.m.

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

## 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. 2010, renew every 2 years)
- **Health Care Providers**
  - **Lianne Stevens**, The Nebraska Medical Center (term ends Dec. 2010)
  - **Dr. Delane Wycoff**, Pathology Services, PC (term ends Dec. 2011)
    - **Dr. Harris A. Frankel** (alternate)
  - **Joni Cover**, Nebraska Pharmacists Association (term ends Dec. 2012)
  - **September Stone**, Nebraska Health Care Association (term ends Dec. 2010)
  - **John Roberts**, Nebraska Rural Health Association (term ends Dec. 2011)
- **eHealth Initiatives**
  - **Laura Meyers**, Nebraska Statewide Telehealth Network and St. Elizabeth Foundation (term would end Dec. 2012)
  - **Ken Lawonn**, NeHII and Alegent Health (term ends Dec. 2010)
  - **Harold Krueger**, Western Nebraska Health Information Exchange and Chadron Community Hospital (term ends Dec. 2011)
  - **Wende Baker**, Southeast Nebraska Behavioral Health Information Network and Region V Systems (term ends Dec. 2012)
  - **Joyce Beck**, Thayer County Health Services (term ends Dec. 2011)
- **Public Health**
  - **Sue Medinger**, Department of Health and Human Services, Division of Public Health (term ends Dec. 2010)
  - Vacant (term ends Dec. 2011)
    - **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. 2010)
  - **Joel Dougherty**, OneWorld Community Health Centers (term ends Dec. 2011)
- **Payers and Employers**
  - **Susan Courtney**, Blue Cross Blue Shield (term ends Dec. 2012)
  - **Vivianne Chaumont**, Department of Health And Human Services, Division of Medicaid and Long Term Care (term ends Dec. 2010)
- **Consumers**
  - **Nancy Shank**, Public Policy Center (term ends Dec. 2011)
  - **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. 2010)
    - **Todd Searls**, Wide River Technology Extension Center (alternate)
  - **Donna Hammack**, **St. Elizabeth Medical Center** (term would end Dec. 2011)

## Laura Meyers, Director of Development, DKG Consultants, Inc.

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Laura Meyers has worked with DKG Consultants, Incorporated since 2005. Her responsibilities include or have included project management, oversight and execution of daily operations in the projects listed below. Laura has also taken a lead or supportive role in development of grants, development of reports and evaluation, and oversight of budgets. Roles include:

- **2005-Present:** Along with Dave Glover, serving as the consultant and Grant Project Manager for the Nebraska Statewide Telehealth Network, a collaborative of 108 health care facilities, supported through various grant sources, federal and state funds. Activities include:
  - Facilitating development of a strategic direction;
  - Creating, facilitating and helping to execute work plan activities to meet federal grant objectives and fulfill the strategic plan;
  - Planning, organizing and managing evaluation activities, reports, contracts and budgets;
  - Acting as a liaison between federal and state funding sources, project officers, vendors and members;
  - Educating lawmakers and other constituents about telehealth, its uses and the impact of regulatory change on the delivery of telehealth;
  - Assisting the Governing Committee in developing relationships and collaboration opportunities with other organizations;
  - Assisting the Governing Committee in facilitating expansion of telehealth capabilities and access;
  - Organizing, planning and facilitating meetings.
- **2005-Present:** Along with Dave Glover, coordinating the Tri-Cities Medical Response System, a collaborative project covering 23 counties, with the mission of creating and maintaining an integrated system for responding to public health emergencies and disasters and increasing the capability to manage a large number of casualties by enhancing local planning efforts among first responders and the medical community
- **2005- Present:** Assisting hospitals and health departments in developing strategic plans
- **2005-Present:** Assisting hospitals and health departments in implementing Balanced Scorecards through the Nebraska Critical Access Hospital FLEX program
- **January, 2011-Present:** Serving as the Executive Director of the Nebraska Association of Local Health Directors
- **2007-2009:** Coordinating the Rural Nebraska Medical Response System Partnership, a collaborative grant funded project with over 70 partners, designed to enhance emergency preparedness capabilities
- **2006-2007:** Serving as part of a team responsible for development of EHRNebraska, an electronic health record project funded through the Physicians' Foundation for Health Systems Excellence, Excellence in Practice Grant

Prior to joining DKG Consultants, Laura served as Director of Outreach and Telehealth Services at Good Samaritan Hospital. Responsibilities included coordination of the Critical Access Hospital Network, oversight of the Mid-Nebraska Telemedicine Network and developing and maintaining relationships with area healthcare professionals, including assistance in development of educational programs. Laura also assisted in physician recruitment and served as the interim director of Corporate Communications.

Laura holds a Bachelor of Science degree in Organizational Communication and has completed post-graduate work in Business Administration. She also served as the President of the Nebraska Rural Health Association in 2010 and is a current Board Member.



# Nebraska State HIE Requirements

## Jan. 1, 2011 and Quarterly Thereafter

- Provide a timeline and reports on progress against the timeline for NeHII implementation of **CCD** functionality.
- Provide a timeline and reports on progress against the timeline for enhancement and deployment of NeHII **authoritative provider directory**. Post-deployment reports will indicate how the directory is being maintained and will catalog challenges, lessons learned, and promising practices developed through the process

## Upon Goal-Setting (Jan. 11 eHealth Council meeting) and Quarterly Thereafter

Connections for

- Pharmacies
- Labs
- Hospitals
- Health Care providers (including behavioral health, public health, and health plans)

Report on the following targets

### NeHII

- 21 hospitals (22% of Nebraska hospitals or 45% of hospital beds)  
2,000 total users, including physicians, mid-levels, nurses, pharmacists, and staff
- 1,000 physicians out of 3,000 physicians in state (33% of physicians)
- 1 out of six independent reference labs
- 21 hospital labs out of 90 hospital labs (21% of hospital and independent reference labs total)

### eBHIN

- 1 hospital
- 776 providers out of 3,929 behavioral health providers (20% of behavioral health providers)

## **Feb. 1, 2011**

- Strategic and Operational Plans endorsed by stakeholders
- Letter of support from Medicaid Director indicating alignment between State Medicaid HIT Plan and statewide HIE plan and support of Medicaid content in state HIE plan. (Note: A letter from Vivianne Chaumont was sent in May. Do we need to send a new letter?)
- Letter of support/confirmation from Dr. Schaefer (Note: A letter from Dr. Schaefer was sent in May. Do we need to send a new letter?)
- Letter of support/confirmation from relevant Federally qualified health centers or health controlled networks
- Letter of support/confirmation from Wide River TEC
- Confirmation all staff positions have been filled
- Begin executing plan to remove regulatory and policy barriers and to use regulatory authority to advance standards compliance and trading partner participation in HIE.

## **March 15, 2011**

Plans reviewed updated and submitted to ONC

- Business plan that includes a sustainability plan
- Status of plans to use state purchasing power to enhance the demand for care coordination and information exchange
- Status of plans to create web-enabled state level directories, supporting standards-based directory queries, including health care provider directories, health plan directories, and licensed clinical laboratories
- Status of demonstrations of provider and patient authentication services
- Implementation and evaluation of policies and legal agreements
- Report on statewide HIE alignment with other federal programs

Sustainability Plan endorsed by Stakeholders

*This list only includes those requirements with deadlines. Other ongoing-requirements are included in the attachment to the Notice of Award.*



### ***Provider Directory Summary and Timeline***

In order to meet the requirements for the statewide HIE, NeHII has commenced a project to design and implement a state-level provider directory that would provide services to all providers within the State of Nebraska. Details on this directory can be found in the State Operational Plan on pages 54 and 55. This project commenced on December 15<sup>th</sup>, and contains the following milestones:

- Project Start (12/15/2010)
- Project Charter complete and approved (2/15/2011)
- Vendor Statement of Work Authorized (3/1/2011)
- Development and Testing Complete (7/30/2011)
- System go-live (9/1/2011)

### ***Continuity of Care Document Summary and Timeline***

NeHII currently contains the functionality to send Continuity of Care, or CCD documents to facilitate the exchange of health information among providers and patients. In the current system, NeHII has the ability to generate and transmit a CCD document. In 2011, NeHII will commence projects to work with specific pilot participants to exchange the CCD standard. These projects and their timelines are:

- **Personal Health Record Gateway**
  - o Project Start (1/3/2011)
  - o Project Charter complete and approved (2/15/2011)
  - o Vendor Statement of Work Authorized (2/15/2011)
  - o System go-live with two national PHR vendors (3/1/2011)
- **External Provider (to be determined)**
  - o Project Start (3/1/2011)
  - o Project Charter complete and approved (4/15/2011)
  - o Vendor Statement of Work Authorized (4/15/2011)
  - o Development and Testing Complete (7/30/2011)
  - o System go-live (8/1/2011)

## Nebraska eHealth Goals

Connectivity Goals—2011	Baseline—2010	Target—End of 2011
Hospitals	<p><b>NeHII</b></p> <ul style="list-style-type: none"> <li>• 15 hospitals</li> <li>• 13% of Nebraska hospitals</li> <li>• 39% of hospital beds</li> </ul>	<p><b>NeHII</b></p> <ul style="list-style-type: none"> <li>• 21 hospitals</li> <li>• 22% of Nebraska hospitals</li> <li>• 45% of hospital beds</li> </ul> <p><b>eBHIN</b></p> <ul style="list-style-type: none"> <li>• 1 hospital</li> </ul>
Providers	<p><b>NeHII</b></p> <ul style="list-style-type: none"> <li>• 1,288 total users, including physicians, mid-levels, nurses, pharmacists, and staff</li> <li>• 500 Physician and Physician Extenders out of 4,266 in state               <ul style="list-style-type: none"> <li>• 12% of physicians and physician extenders</li> </ul> </li> </ul>	<p><b>NeHII</b></p> <ul style="list-style-type: none"> <li>• 2,000 total users, including physicians, mid-levels, nurses, pharmacists, and staff</li> <li>• 900 physicians and physician extenders out of 4,266 in state               <ul style="list-style-type: none"> <li>• 21% of physicians and physician extenders</li> </ul> </li> </ul> <p><b>eBHIN</b></p> <ul style="list-style-type: none"> <li>• 776 providers out of 3,929 behavioral health providers</li> <li>• 20% of behavioral health providers</li> </ul>
Health Plans	<ul style="list-style-type: none"> <li>• 1 health plan (BlueCross BlueShield of Nebraska) currently participates</li> </ul>	<ul style="list-style-type: none"> <li>• 1 health plan</li> <li>• <b>Note:</b> By mid-2011, Nebraska’s Medicaid program will have submitted its State Medicaid HIT Plan. The plan will include recommendations on how Nebraska Medicaid will participate in health information exchange.</li> </ul>
Lab Connectivity Goals	<p><b>NeHII</b></p> <ul style="list-style-type: none"> <li>• 0 out of six independent reference labs</li> <li>• 10 hospital labs out of 90 hospital labs</li> <li>• 10% of 96 hospital and major independent reference labs</li> </ul>	<p><b>NeHII</b></p> <ul style="list-style-type: none"> <li>• 1 out of six independent reference labs</li> <li>• 21 hospital labs out of 90 hospital labs</li> <li>• 21% of hospital and independent reference labs</li> </ul> <p><b>eBHIN</b></p> <p>N/A. eBHIN will most likely go through NeHII for laboratory information.</p>

<b>Public Health Goals</b>	<b>Baseline—2010</b>	<b>Suggested 2011 Target</b>
# of providers submitting data to the immunization registry	238	An increase of 20% to 286
# of labs submitting data to NEDSS	12	An increase of 30% to 16
# of hospitals submitting data to the syndromic surveillance system	6	16

<b>E-Prescribing Goals—2011</b>	<b>Baseline--End of 2009</b>	<b>End of 2011</b>
<b>Pharmacists</b>	<ul style="list-style-type: none"> <li>• <b>78% of community pharmacists activated for e-prescribing</b></li> </ul> <p>Here are the 2009 statistics for some of our neighboring states:  CO--93%  KS--82%  SD--80%  IA--87%  WY—86%</p>	<ul style="list-style-type: none"> <li>• <b>90% of community pharmacists activated for e-prescribing</b></li> </ul>
<b>Physicians/Prescribers</b>	<ul style="list-style-type: none"> <li>• <b>11% of physicians in Nebraska routed prescriptions electronically</b></li> </ul> <p>Here are the 2009 statistics for some of our neighboring states:  CO--18%  KS--22%  SD--26%  IA--48%  WY--12%</p> <p>Iowa jumped from just 12% of physicians e-prescribing in 2008 to 48% in 2009.</p>	<ul style="list-style-type: none"> <li>• <b>50% of physicians in Nebraska routing prescriptions electronically</b></li> </ul>

# 2011 Nebraska eHealth Plan

## Draft Outline

### Vision

### Goals

#### Status of Nebraska's eHealth Initiatives

- NeHII
- eBHIN
- Medicaid
- Wide River Technology Extension Center
- SENHIE?
- WNHIE/Rural Health Care Network
- Nebraska Statewide Telehealth Network
- Metropolitan Community College
- Broadband Initiatives?

#### Coordination/Alignment with Federal Programs

#### Physician/Provider Participation

- Status
- Goals
- Timeline

#### Hospital Adoption Participation

- Status
- Goals
- Timeline

#### Other Providers

- Long term care
- Corrections
- Rural Health Clinics

#### E-Prescribing

- Status
- Goals
- Timeline

## **Public Health**

- Status
- Goals
- Timeline

## **Structured Lab Results**

- Status
- Goals
- Timeline

## **Provider Directory**

- Status
  - Status of plans to create web-enabled state level directories, supporting standards-based directory queries, including health care provider directories, health plan directories, and licensed clinical laboratories
  - Status of demonstrations of provider and patient authentication services
- Goals
- Timeline

## **Continuity of Care Document**

- Status
- Goals
- Timeline

## **NHIN/NIST**

**Policies/Legal Agreements**—Implementation and evaluation of policies and legal agreements

**Status of plans to use state purchasing power to enhance the demand for care coordination and information exchange**

## **Sustainability Plan**

## **Evaluation Plan**

## **Timelines**

## **ONC Requirements Regarding the Plan**

**March 15, 2011**

Plans reviewed, updated and submitted to ONC

- Business plan that includes a sustainability plan (State HIE Grant General Requirements F.2)
- Status of plans to use state purchasing power to enhance the demand for care coordination and information exchange
- Status of plans to create web-enabled state level directories, supporting standards-based directory queries, including health care provider directories, health plan directories, and licensed clinical laboratories
- Status of demonstrations of provider and patient authentication services
- Implementation and evaluation of policies and legal agreements (State HIE Grant General Requirements L.4)
- Report on statewide HIE alignment with other federal programs (State HIE Grant General Requirements O.2)

Sustainability Plan endorsed by Stakeholders

### **Cohort 3 State HIE Grant General Requirements**

F.2 (Financial Sustainability Plan) By 3/12/2011 (or one-year from start date specified in the Notice of Award), recipients are required to update their strategic and operational plans annually to update their plans on sustainability to ONC that includes a business plan with feasible public/private financing mechanisms for ongoing information exchange.

L.4 (Implementation and Evaluation Plan) By 3/12/2011 (or one-year from start date specified in the Notice of Award), recipients are required to update their strategic and operational plans annually to address the implementation and evaluation of policies and legal agreements related to HIE.

O.2 (Alignment with ARRA Plan)—By 3/12/2011 (or one-year from start date specified in the Notice of Award), recipients are required to update their strategic and operational plans annually to address statewide HIE alignment with other federal programs.



## Byers, Anne

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**From:** Smith, Molly (HHS/ONC) <Molly.Smith@hhs.gov>  
**Sent:** Thursday, December 23, 2010 10:13 AM  
**To:** Smith, Molly (HHS/ONC)  
**Cc:** Branick, Kerry (HHS/ONC); Galvez, Erica (HHS/ONC); OS Farnum, Gregory; Hardin, Mariza (HHS/ONC); Lawton, David (HHS/ONC); Muir, Christopher (OS/ONC); Stevens, Lee (HHS/ONC); Tipping, Kate (HHS/ONC); Williams, Claudia (HHS/ONC); Mertz, Kory (HHS/ONC); Hargiss, Melissa (HHS/ONC)  
**Subject:** Update on Upcoming Cooperative Agreement Deliverable Due Dates  
**Importance:** High

Dear State HIE Grantees:

According to the General Program Requirements of the State HIE Cooperative Agreement Program, included as part of your Notice of Grant Award, several deliverables are due in the coming months. For instance, for Cohort 1 and 2 States, several items, including a Sustainability Plan, are due February 11, 2011. **Please note that we will be extending the deadlines for these deliverables.** ONC is in the process of drafting additional guidance on the required content and revised timeline for these items. We will discuss the status and process for developing this guidance in the next several weeks.

This notice applies to the following deliverables only:

- F.2 (Financial Sustainability Plan)
- L.4 (Implementation and Evaluation Plan)
- O.2 (Alignment with ARRA Plan)

Thank you,

Claudia Williams

## **ONC Planning Philosophy**

“If you want to build a ship, don't drum up people to collect wood and don't assign them tasks and work, but rather teach them to long for the endless immensity of the sea.”

**Antoine de Saint-Exupery**

“Nobody has to teach you how to whistle. It's really very simple. You just have to think the tune to have it come out perfectly clear.”

**Harold Hill, *The Music Man***

“There is trouble right here in River City.”

**Harold Hill, *The Music Man***

## Project Abstract

<b>Project Title</b>	Health Information Exchange Challenge Program
<b>Challenge Theme Addressed</b>	Challenge Theme One: Achieving Health Goals through Health Information Exchange
<b>State/territory, geographic area and target population for the effort</b>	State of Nebraska
<b>Applicant Name</b>	State of Nebraska Information Technology Commission (NITC)
<b>Address</b>	501 South 14 <sup>th</sup> St, P.O. Box 95045 Lincoln, NE 68509-5045
<b>Contact Name</b>	Anne Byers
<b>Contact Phone Numbers (Voice, Fax)</b>	Voice: 402-471-3805 Fax: 402-471-4864
<b>E-Mail Address</b>	Anne.Byers@nebraska.gov
<b>Web Site Address, if applicable</b>	<a href="http://nitc.nebraska.gov/">http://nitc.nebraska.gov/</a> ; <a href="http://www.nehii.org">http://www.nehii.org</a>
<b>Congressional districts within the target area</b>	Nebraska Congressional Districts 1, 2 and 3

The Nebraska Information Technology Commission (NITC) is an applicant for the Health Information Exchange Challenge Grant in order to achieve community goals related to preventing prescription drug abuse in the state of Nebraska. Together, NITC and its stakeholders will provide a comprehensive, high quality and timely Medication History and Alert System (MHAS) to healthcare providers throughout our state.

As in many states, Nebraska experiences significant issues related to non-medical use of prescription drugs. Out of a population of 1.7 million in 2007, 54,000 Nebraskans age 12 and older used pain relief medication for non-medical purposes, and in 2009, 875 of the state's emergency department visits were the result of prescription drug overdose or misuse. Providing MHAS will assist healthcare providers in delivering appropriate treatments at the point of care to help reduce the frequency of these occurrences.

The Nebraska Information Technology Commission proposes to utilize the existing Virtual Health Record (VHR) and Medication Management capabilities of the Nebraska Health Information Initiative (NeHII) to deliver this breakthrough technology. Provider adoption will be enhanced with the development of a proactive alert system to advise physicians and other prescribers, such as pharmacists who dispense medications, of possible irregularities in the patient's medication list allowing providers to make more informed treatment decisions at the point of care.

With an existing infrastructure and the magnitude of use of the Nebraska Health Information Initiative (NeHII) technology benefit is easily observed from the development and expansion of this technology, giving Nebraska the opportunity to reduce the risks of non-medical use of prescription drugs.

Through the development and expansion of this technology, a number of ancillary benefits will be realized. First, prescribers will have access to a comprehensive set of medication information data that

will provide even more reliable drug interaction details that does conventional HIE technology; In addition, providers will have viewing capabilities of not only prescribing information, but they will also have access to corresponding dispensing information; healthcare providers may use the comprehensive prescribing and dispensing data to conduct effective therapeutic medication management; and MHAS will contain the information needed to serve as a highly effective Medication Reconciliation application for healthcare providers in Nebraska and across the country via the NHIN

NITC and NeHII are excited to lead in the development of these exciting new capabilities and look forward to sharing our results, and the technology that produced them, with other states in order to improve the quality and efficiency of healthcare.

# NeHII Fact Sheet

December 31, 2010



## NeHII Application for Statewide HIE

- Based on hybrid federated model
- Uses an opt out platform
- HIPAA Compliant
- Utilizes Elysium software developed by Axolotl
- CCHIT Certified
- [www.nehii.org](http://www.nehii.org)

## Implementation Seed Capital

- Class B membership dues paid
  - Alegent Health, Children's Hospital and Medical Center, Methodist Health System, The Nebraska Medical Center
  - BlueCross and BlueShield of Nebraska
- Nebraska Information Technology Commission (NITC) Grant
- ONC State Cooperative Agreement Program

## Participant Information

- Participants include:
  - Alegent Health System, Children's Hospital and Medical Center, Methodist Health System, The Nebraska Medical Center, Mary Lanning Memorial Hospital, Great Plains Regional Medical Center
  - BlueCross and BlueShield of Nebraska

## Statewide HIE

- Statewide rollout began in July 2009
- Statewide Integrator designated in September 2009
- 501(c)(3) status received in November 2009

## Latest News

- Dr. David Blumenthal, National Coordinator for HIT, visits Omaha - [World Herald Article](#) - July 22, 2010
- Joining NeHII are Community Medical Center in Falls City and Creighton University Medical Center

## Updated Statistics as of: December 31, 2010

<b>Patient demographics across the state</b>	<b>1,713,831</b>	
• Total patients that have Opted Out	43,600	2.54%
• Total patients Opting back In	2,919	6.69%
<b>Provider Information</b>		
• Number of users accessing the VHR	1,093	
• Number of users accessing the EMR	195	
<b>Number of requests in the system:</b>		
• Percentage of requests completed in less than 2 seconds		93.69%
<b>Number of prescriptions sent electronically, faxed or printed</b>	<b>28,827</b>	
• Electronic		96.88%
• Printed		1.64%
• RxHUB Mail Order		1.48%
<b>Number of results sent to Exchange</b>	<b>16,737,011</b>	
• LAB	12,001,481	
• RAD	2,898,101	
• Transcription	1,837,429	

## *Exchanging Behavioral Health Care Information in Nebraska*



Electronic Behavioral Health  
Information Network

The Electronic Behavioral Health Information Network (eBHIN) is creating a behavioral health information network in two behavioral health regions in Nebraska with plans to expand statewide as time and resources allow. eBHIN will connect to Nebraska's statewide integrator, NeHII, making comprehensive health information available for behavioral health clients.

### *eBHIN's Mission*

eBHIN's mission is to promote quality care in Nebraska through efficient, secure, and confidential handling of behavioral health data and patient information to facilitate seamless, integrated patient care and access from multiple locations.

### *eBHIN Operating Features*

- Based on centralized data repository and standardized patient record exchange
- Uses an opt-in platform
- HIPAA & CFR 42 Compliant
- Utilizes software developed by NextGen Healthcare Information Systems
- CCHIT Certified EMR

### *Implementation Funding*

- Region V Systems
- Nebraska Information Technology Commission (NITC)
- Agency for Healthcare Research Quality (AHRQ)
- Health Resources Services Administration (HRSA)
- State of Nebraska – State HIE Cooperative Agreement

### *Phase 1 - HIE Implementation*

- Data Center Partner: Heartland Community Health Network
- Phase I "Go Live" planned for Region V in Southeast Nebraska early Spring 2011

### *Phase 2 & 3 - Expanded Utilization*

- EMR/EPM Integration planned for Phase 2 – post HIE "Go Live" in Region V
- Region I (Western Nebraska) rollout planned 2011 for Phase 3

### *Network Partners*

- Blue Valley Behavioral Health
- BryanLGH Medical Center
- CenterPointe
- Child Guidance Center
- Community Mental Health Center
- Cornhusker Place
- Houses of Hope
- Lincoln Council on Alcoholism and Drugs
- Lincoln Medical Education Partnership
- Lutheran Family Services
- Mental Health Association
- Region V Systems
- St. Monica's Home

### *Contact*

Wende Baker, Network Director

[wbaker@region5systems.net](mailto:wbaker@region5systems.net)

(402) 441-4388

# Standard Behavioral Health Care Record Design

Electronic Behavioral Health Information Network  
(eBHIN) and NextGen – Templates

11/3/10

# Registration - Demographics

NextGen EHR: Susan Q Z1Test - [10/29/2010 10:04 AM: "Registration - Demographics"]

File Edit Default View Tools Admin Utilities Window Help

Blue Valley BH Center Provider, Test

Logout Save Clear Delete Patient History Inbox PAR EPM ICS Close

**Demographics** Registration Information History Assessment/Diagnosis Meds/Allergies

Agency Assigned ID#: BV00125 Admission Date: // Type of Service: Type of Registration:  Initial  Edit  Re-registration Age at Admission: 17 Years Magellan Authorization Number:

**Demographic Information** Demographics

Last Name: Z1Test First Name: Susan Middle Name: Q Date of Birth: 10/08/1993 Gender: F Marital Status: Never Married Veteran Status:  No  Yes

Previous Last/Maiden Name: Suffix: Social Security Number: Disability: No observable handicap or impairment

Address: 1000 High Street Race: White American Indian

City: Lincoln State: NE Zip: 68506- Ethnicity: Not of Hispanic Origin

Phone: Home Phone: (402)698-8888 Primary:  Home  Day  Cell  Alternate Preferred Language: English U.S. Citizen:  No  Yes

Day Phone: (402)698-8888 Ext. Cell County of Residence: Lancaster Immigration Number:

Alternate Phone: ( ) - Ext. Phone Type:

**Other**

Alias: Last Name First Name

Emergency contact: Kent Clark Friend (402)555-1212 ( ) - Add to Grid

Patient relationship/support role

Last Name	First Name	Relationship	Home	vWork
Kent	Clark	Friend	4025551212	

Type of Medical Home: Public Clinic (FQHC)

Name of Medical Home: People's Health Center

Staff Assigned:

Last Name	First Name	Role	Begin Date
Nightingale	Florence	Therapist	11/01/2010

Next

Ready Nextgen Health Clinic kjeangilles CAP NUM SCRL 11/01/2010



# Altering Demographic Data

NextGen EHR: Susan Q Z1Test - [Ebhin Patient]

File Edit Default View Tools Admin Utilities Window Help

Logout Save Clear Delete Blue Valley BH Center Provider, Test Patient History Inbox PAQ EPM ICS Close

Agency Assigned ID: BV00125 Person Nbr: 99

**Patient information**

Last name: Z1Test First name: Susan MI: Q Social Security Number: 1008/1993 Sex: F Birth date: 10/08/1993 Agency Assigned ID: BV00125 Person Nbr: 99

Address: 1000 High Street

City: Lincoln State: NE ZIP: 68506- Primary Insurance:

County:

Phone: Home: (402)698-8888 Extension: Work: (402)698-8888 Cell: ( ) - Alternate: ( ) - Type:

**Emergency contact**

Last name: Kent First name: Clark MI: Relationship: Friend

Address: 100 Superman Way

City: Lincoln State: NE ZIP: 68506- Home: (402)555-1212 Alternate: ( ) - Type:

**Patient relationship/support role** (double click row to edit or view additional details.) Mother's maiden name:

Name	Relationship	Support role	Home phone	Work phone	Comments
	Friend		4025551212		

**Employment**

Emp Status	Occupation	Phone	Extension

Page Down Save and Close

Ready Nextgen Health Clinic kjeangilles CAP NUM SCRL 11/01/2010

# Registration Information – Child/Adolescent

NextGen EHR: Susan Q Z1Test - [10/29/2010 10:04 AM : "Registration Information"]

File Edit Default View Tools Admin Utilities Window Help

Logout Save Clear Delete Blue Valley BH Center Provider, Test Patient History Inbox PAQ EPM ICS Close

Demographics **Registration Information** History Assessment/Diagnosis Meds/Allergies

Agency Assigned ID#: BV00125 Admission Date: // Type of Service: Type of Registration:  Initial  Edit  Re-registration

**Financial Information**

Number of dependents: 1 Medicare/Medicaid Eligibility: Det. To Be Inelig-N/A

Annual Gross Income (nearest \$1,000): \$ 12000 Health Insurance Coverage: PPO

Primary Income Source: Employment Primary Insurance: Anthem PPO

Additional Sources of Income:  Public Assistance  Employment  None  Retirement/Pension  Disability  Other

Secondary Insurance: Primary source of payment: State Children and Family Services

SSI/SSDI Eligibility: Det. To Be Inelig-N/A

**Admission Information**

County of Admission: Lancaster Employment Status at time of admission: Employed Part Time (< 35 Hrs) [Add to Grid](#)

Status	Name	Occupation	Retire Date
Employed Part Time (< 35 Hrs)			//

Admission Referral Source: Family Referral Date: 10/19/2010

Referral Source Code: Family/Relative

Living Situation at time of admission: Child Liv. w/Par/Rela

First Name: Jane Last Name: Dough Phone Number: (402)555-1100

Social Supports at time of admission: No attendance in the past month

Is this person a Collateral or Significant Other?  No  Yes  N/A

Mental Health Board (MHB) Hearing Date: //

Mental Health Board (MHB) Commitment Date: //

Education: < = 10 Years

**Child/Adolescent Information**

School Attendance (last six months): 1 day every 2 weeks

Stable Environment (Legal Custody): Parent(s)

Involved with Juvenile Services: Not Involved with Juvenile Services

Receiving Professional Partner Services:  No  Yes

Receiving Special Education Services:  No  Yes

[Previous](#) [Next](#)

Ready Nextgen Health Clinic kjeangilles CAP NUM SCRL 11/01/2010

# Registration Information – Adult

NextGen EHR: Susan Q Z1Test - [10/29/2010 10:04 AM: "Registration Information"]

File Edit Default View Tools Admin Utilities Window Help

Logout Save Clear Delete Blue Valley BH Center Provider, Test Patient History Inbox PAQ EPM ICS Close

Demographics **Registration Information** History Assessment/Diagnosis Meds/Allergies

Agency Assigned ID#: BV00125 Admission Date: // Type of Service: Type of Registration:  Initial  Edit  Re-registration

**Financial Information**

Number of dependents: 1 Medicare/Medicaid Eligibility: Det. To Be Inelig-N/A

Annual Gross Income (nearest \$1,000): \$ 12000 Health Insurance Coverage: PPO

Primary Income Source: Employment Primary Insurance: Anthem PPO

Additional Sources of Income:  Public Assistance  Employment  None  Retirement/Pension  Disability  Other Secondary Insurance:

SSI/SSDI Eligibility: Det. To Be Inelig-N/A Primary source of payment: HMO/PPO

**Admission Information**

County of Admission: Lancaster Employment Status at time of admission: Employed Part Time (< 35 Hrs) [Add to Grid](#)

Status	Name	Occupation	Retire Date
Employed Part Time (< 35 Hrs)			//

Admission Referral Source: Family Referral Date: 10/19/2010

Referral Source Code: Family/Relative

Living Situation at time of admission: Priv. Res. w/o Support

First Name: Jane Last Name: Dough Phone Number: (402)555-1100 Social Supports at time of admission: No attendance in the past month

Is this person a Collateral or Significant Other?  No  Yes  N/A

Education: 12 Years = GED

Mental Health Board (MHB) Hearing Date: //

Mental Health Board (MHB) Commitment Date: //

Previous Next

Ready Nextgen Health Clinic kjeangilles CAP NUM SCRL 11/01/2010

# Registration – History

NextGen EHR: Susan Q Z1Test - [10/29/2010 10:04 AM: "Registration - History"]

File Edit Default View Tools Admin Utilities Window Help

Logout Save Clear Delete Blue Valley BH Center Provider, Test Patient History Inbox PAQ EPM ICS Close

Demographics Registration Information **History** Assessment/Diagnosis Meds/Allergies

Agency Assigned ID#: BV00125 Admission Date: / / Type of Service: Type of Registration:  Initial  Edit  Re-registration

**Substance Abuse History**

Current or past history of substance abuse?  No  Yes IV drug use in the past?  No  Yes

	Age at First Use:	Substance Name:	Frequency of Use:	Volume of Use:	Route:	Last Use:
Primary:	12	Alcohol	1-2 times past week	40 ounces	Oral	10/31/2010
Secondary:	15	Marijuana/hashish	1-3 times past month	2 cigarettes	Smoke	10/30/2010
Tertiary:	16	Meperidine (Demerol)	Unknown	3 pills	Oral	07/01/2010

**Other History**

Legal Status at Admission: Court: Juvenile Evaluation

Criminal Activity (number of arrests in past 30 days) at time of admission: 1

Suicide Attempt - Has this person attempted suicide in the last 30 days?  No  Yes

Trauma history:  No  Yes  Unknown

- Sexual Abuse  Child  Adult  Both  No
- Physical Abuse  Child  Adult  Both  No
- Emotional Abuse  Child  Adult  Both  No
- Neglect  Child  Adult  Both  No
- Witness to Domestic Abuse  Child  Adult  Both  No
- Victim/Witness to Community Violence  Child  Adult  Both  No
- Physical Assault  Child  Adult  Both  No
- Serious Accident/Injury  Child  Adult  Both  No
- Sexual Assault/Rape  Child  Adult  Both  No
- Life Threatening Medical Issues  Child  Adult  Both  No
- Traumatic Loss of a Loved One  Child  Adult  Both  No
- Victim of a Terrorist Act  Child  Adult  Both  No
- War/Political Violence/Torture  Child  Adult  Both  No
- Disasters (Tornado/Earthquake)  Child  Adult  Both  No
- Sanctuary Trauma (while institutionalized)  Child  Adult  Both  No
- Prostitution/Sex Trafficking  Child  Adult  Both  No

Previous Next

Ready Nextgen Health Clinic kjeangilles CAP NUM SCRL 11/01/2010

# Registration (Child/Adolescent) – Assessment/Diagnosis

NextGen EHR: Susan Q Z1Test - [10/29/2010 10:04 AM: "Registration - Assessment/Diagnosis"]

File Edit Default View Tools Admin Utilities Window Help

Logout Save Clear Delete Blue Valley BH Center Provider, Test Patient History Inbox PAQ EPM ICS Close

Demographics Registration Information History Assessment/Diagnosis Meds/Allergies

Agency Assigned ID#: BV00125 Admission Date: / / Type of Service: Type of Registration:  Initial  Edit  Re-registration

**Assessment**

Reason for this Admission: Primary Mental Health/Secondary SA

Reason for Emergency Protective Custody Admission: Dangerous to self/suicide attempt

Days waiting to enter Substance Abuse program: 13

Referral/Screening Date: 10/19/2010

Mental Health Board (MHB) Hearing Date: / /

Mental Health Board (MHB) Commitment Date: / /

Is the consumer pregnant?  No  Yes  Up To 6 Weeks Post Partum

Is the use of Methadone/Buprenorphine/Suboxone/Opioids in treatment planned?  No  Yes

Number of prior treatment episodes: 0

**Child/Adolescent**

Meets Nebraska Serious Emotional Disturbance (SED) criteria?  No  Yes  N/A

Type of Service - Child/Adolescent: Ch Day Treatment

**DSM-IV Diagnosis**

Date of Diagnosis: 11/01/2010

Cluster Classification: 2 Certainty Index: 2

**Axis III (reported by patient):**

Diabetes, type II

Fatigue

**Axis IV Problems related to:**

Accessing health care  Education  Economic  Housing

Legal system/crime  Occupation  Primary support group

Social environment  Other Psychosocial and Environmental Problem

**Axis V Global Assessment of Functioning (GAF) Scale**

Current GAF: 55 Date: 10/29/2010

Axis	Assessment	Code	Status
<input type="radio"/> Axis I	Major Depression, Single Episode	296.20	Worse
<input type="radio"/> Axis I	Alcohol Intoxication	303.00	Recurrent
<input checked="" type="radio"/> Axis I	Cannabis Abuse	305.20	Symptomatic
<input type="radio"/> Axis II	Borderline personality disorder	301.83	Chronic

Ready Nextgen Health Clinic kjeangilles CAP NUM SCRI 11/01/2010

# Registration (Adult) - Assessment/Diagnosis

NextGen EHR: Susan Q Z1Test - [10/29/2010 10:04 AM: "Registration - Assessment/Diagnosis"]

File Edit Default View Tools Admin Utilities Window Help

Logout Save Clear Delete Blue Valley BH Center Provider, Test Patient History Inbox PAQ EPM ICS Close

Demographics Registration Information History **Assessment/Diagnosis** Meds/Allergies

Agency Assigned ID#: BV00125 Admission Date: / / Type of Service: Type of Registration:  Initial  Edit  Re-registration

**Assessment**

Reason for this Admission: Primary Mental Health/Secondary SA

Reason for Emergency Protective Custody Admission: Dangerous to self/suicide attempt

Is the consumer pregnant?  No  Yes  Up To 6 Weeks Post Partum

Is the use of Methadone/Buprenorphine/Suboxone/Opioids in treatment planned?  No  Yes

Number of prior treatment episodes: 0

Days waiting to enter Substance Abuse program: 13

Referral/Screening Date: 10/19/2010

Mental Health Board (MHB) Hearing Date: / /

Mental Health Board (MHB) Commitment Date: / /

**Adults**

For Adults with mental illness - Meets Severe and Persistent Mental Illness (SPMI) Nebraska criteria?  No  Yes  N/A

Type of Service - Adult: O/P Dual Dx

**DSM-IV Diagnosis**

Date of Diagnosis: 11/01/2010

Cluster Classification: 2A Certainty Index: 2

Axis:	Assessment:	Code:	Status:
<input type="button" value="Clear"/> <input type="radio"/>	Axis I Major Depression, Single Episode	296.20	Worse
<input type="button" value="Clear"/> <input type="radio"/>	Axis I Alcohol Intoxication	303.00	Recurrent
<input type="button" value="Clear"/> <input checked="" type="radio"/>	Axis I Cannabis Abuse	305.20	Symptomatic
<input type="button" value="Clear"/> <input type="radio"/>			
<input type="button" value="Clear"/> <input type="radio"/>	Axis II Borderline personality disorder	301.83	Chronic
<input type="button" value="Clear"/> <input type="radio"/>			
<input type="button" value="Clear"/> <input type="radio"/>			
<input type="button" value="Clear"/> <input type="radio"/>			

**Axis III** (reported by patient):

Diabetes, type II

Fatigue

**Axis IV** Problems related to:

Accessing health care
  Education
  Economic
  Housing
  Legal system/crime
  Occupation
  Primary support group
  Social environment
  Other Psychosocial and Environmental Problems:

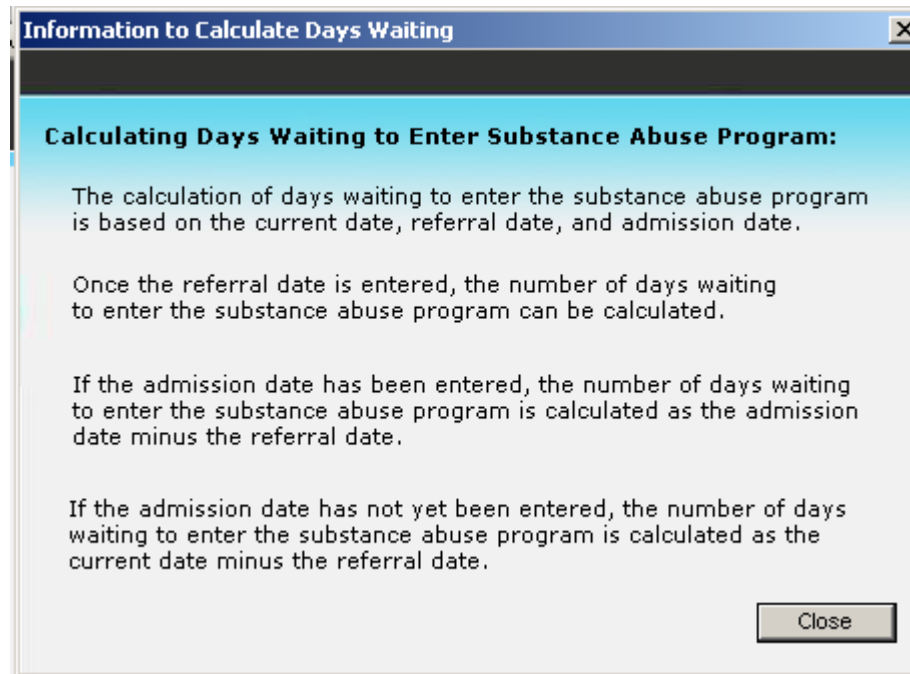
**Axis V**

Current GAF: 55 Date: 10/29/2010

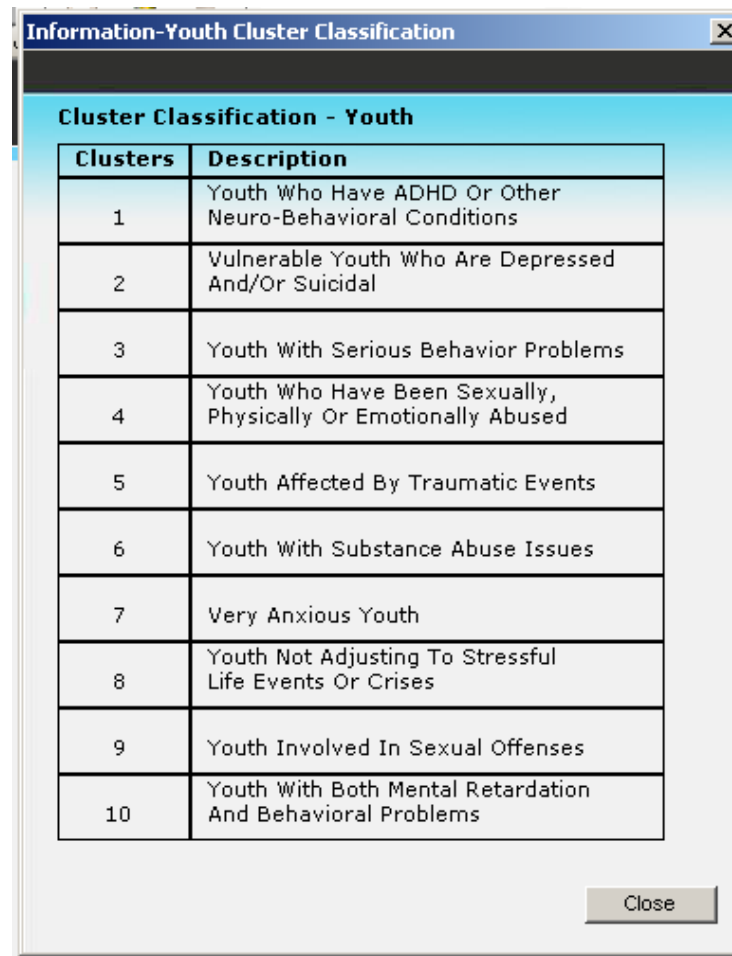
Ready

Nextgen Health Clinic kjeangilles CAP NUM SCRL 11/01/2010

# Calculation of Days Waiting



# Cluster Classification – Youth

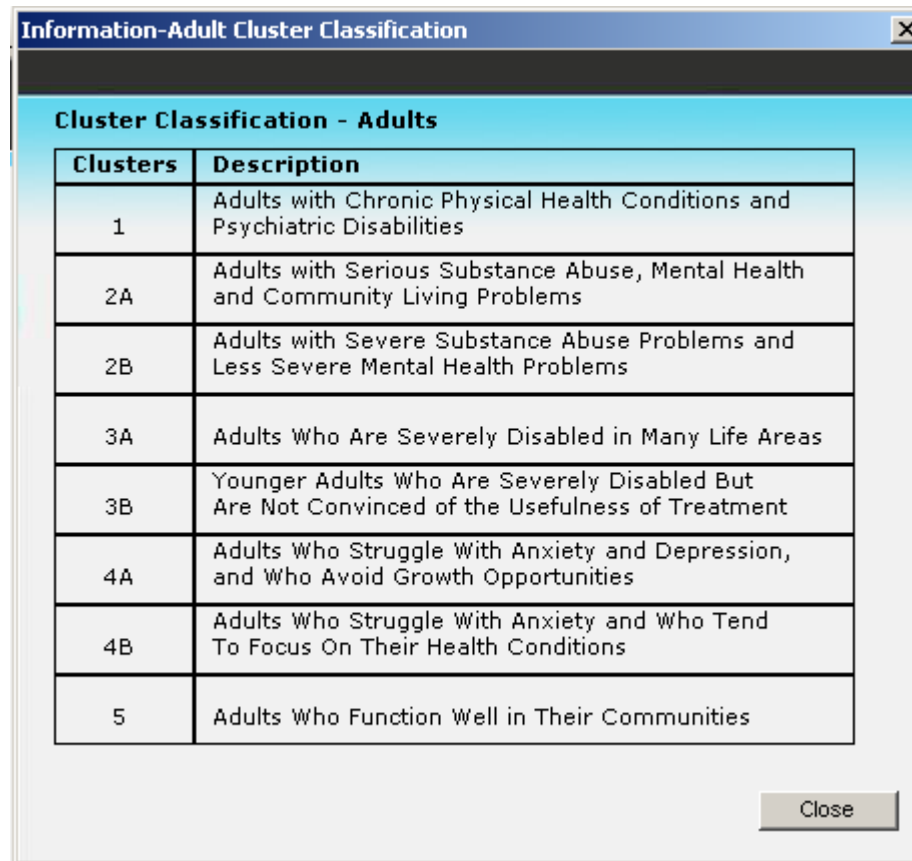


The screenshot shows a software window titled "Information-Youth Cluster Classification" with a close button in the top right corner. Below the title bar is a light blue header area with the text "Cluster Classification - Youth". The main content is a table with two columns: "Clusters" and "Description". The table lists 10 clusters, each with a unique description of youth characteristics. At the bottom right of the window is a "Close" button.

Clusters	Description
1	Youth Who Have ADHD Or Other Neuro-Behavioral Conditions
2	Vulnerable Youth Who Are Depressed And/Or Suicidal
3	Youth With Serious Behavior Problems
4	Youth Who Have Been Sexually, Physically Or Emotionally Abused
5	Youth Affected By Traumatic Events
6	Youth With Substance Abuse Issues
7	Very Anxious Youth
8	Youth Not Adjusting To Stressful Life Events Or Crises
9	Youth Involved In Sexual Offenses
10	Youth With Both Mental Retardation And Behavioral Problems



# Cluster Classification – Adults



**Information-Adult Cluster Classification**

**Cluster Classification - Adults**

Clusters	Description
1	Adults with Chronic Physical Health Conditions and Psychiatric Disabilities
2A	Adults with Serious Substance Abuse, Mental Health and Community Living Problems
2B	Adults with Severe Substance Abuse Problems and Less Severe Mental Health Problems
3A	Adults Who Are Severely Disabled in Many Life Areas
3B	Younger Adults Who Are Severely Disabled But Are Not Convinced of the Usefulness of Treatment
4A	Adults Who Struggle With Anxiety and Depression, and Who Avoid Growth Opportunities
4B	Adults Who Struggle With Anxiety and Who Tend To Focus On Their Health Conditions
5	Adults Who Function Well in Their Communities

Close

# Certainty Ratings

**Information - Certainty Ratings** ✕

**Certainty Ratings**

After assigning the individual to a Cluster, indicate how certain you are of that determination using the following scale:

Rating	Description
1	Very Certain
2	Certain
3	Somewhat Uncertain
4	Very Uncertain
5	Don't Know Client Well Enough
6	Doesn't Fit In Any Cluster

# Global Assessment of Functioning (GAF) Scale

Global Assessment of Functioning (GAF) Scale										
Domain	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100
Symptom Severity	<p>Persistent danger of severely hurting self or others (e.g., recurrent violence)</p> <p>Or</p> <p>serious suicidal act with clear expectation of death.</p> <p>Or</p>	<p>Some danger of hurting self or others (e.g., suicide attempts without clear expectation of death; frequently violent; manic excitement)</p> <p>Or</p> <p>Gross impairment in communication (e.g., largely incoherent or mute)</p> <p>Or</p>	<p>Behavior is considerably influenced by delusions or hallucinations</p> <p>Or</p> <p>serious impairment in communication or judgment (e.g., sometimes incoherent, acts grossly inappropriately, suicidal preoccupation)</p> <p>Or</p>	<p>Some impairment in reality testing or communication (e.g., speech is at times illogical, obscure or irrelevant)</p> <p>Or</p>	<p>Serious symptoms (e.g., suicidal ideation, severe obsessional rituals, frequent shoplifting).</p> <p>Or</p>	<p>Moderate symptoms (e.g., flat affect and circumstantial speech, occasional panic attacks)</p> <p>Or</p>	<p>Some mild symptoms (e.g., depressed mood and mild insomnia)</p> <p>Or</p>	<p>If symptoms are present, they are transient and expected reactions to psychosocial stressors (e.g., difficulty concentrating after family argument)</p>	<p>Absent or minimal symptoms (e.g., mild anxiety before an exam),</p> <p>Generally satisfied with life.</p> <p>No more than everyday problems or concerns (e.g., an occasional argument with family members).</p>	<p>No symptoms</p>
Level of Functioning	<p>Persistent inability to maintain minimal personal hygiene (e.g., smears feces)</p>	<p>Occasionally fails to maintain minimal personal hygiene (e.g., smears feces)</p>	<p>Inability to function in almost all areas (e.g., stays in bed all day, no job, home or friends)</p>	<p>Major impairment in several areas, such as work or school, family relations, judgment, thinking, or mood (e.g., depressed man avoids friend, neglects family, and is unable to work; child frequently beats up younger children, is defiant at home and is failing in school).</p>	<p>Any serious impairment in social, occupational, or school functioning (e.g., no friends, unable to keep a job).</p>	<p>Moderate difficulty in social, occupational, or school functioning (e.g., few friends, conflicts with co-workers).</p>	<p>Some difficulty in social, occupational or school functioning (e.g., occasional truancy, or theft within the household), but generally functioning pretty well, has some meaningful interpersonal relationships..</p>	<p>No more than slight impairment in social, occupational, or school functioning (e.g., temporarily falling behind in school work).</p>	<p>Good functioning in all areas, interested and involved in a wide range of activities, socially effective,</p>	<p>Superior functioning in a wide range of activities, life's problems never seem to get out of hand.</p> <p>Is sought out by others because of his or her many positive qualities</p>

Close

# Registration - Meds/Allergies

NextGen EHR: Susan Q Z1Test - [10/29/2010 10:04 AM : "Registration - Meds/Allergies"]

File Edit Default View Tools Admin Utilities Window Help

Logout Save Clear Delete Blue Valley BH Center Provider, Test Patient History Inbox PAQ EPM ICS Close

Alert Demographics Registration Information History Assessment/Diagnosis **Meds/Allergies**

Agency Assigned ID#: BV00125 Admission Date: / / Type of Service: Type of Registration:  Initial  Edit  Re-registration Submit Description of error found:

**Medications**

Medication	Sig Code	Start	Stop
Novolin 70/30 PenFill 100 unit/mL (70-30) SubQ Cartridge		10/29/2010	/ /

**Allergies**

Description	Reaction
PENICILLINS	Altered Heart Rate
	Altered Heart Rate
IODINE	
POTASSIUM IODIDE	
SODIUM IODIDE	

Previous

Ready Nextgen Health Clinic kjeangilles CAP NUM SCRL 11/01/2010

# Discharge Information

NextGen EHR: Susan Q Z1Test - [10/29/2010 10:04 AM: "Discharge Info"]

File Edit Default View Tools Admin Utilities Window Help

Logout Save Clear Delete Blue Valley BH Center Provider, Test Patient History Inbox PAQ EPM ICS Close

Alert Discharge Information Assessment

Agency Assigned ID#: BV00125 Admission Date: / / Type of Service:

Demographics

Last name: Z1Test First name: Susan Middle name: Q Date of Discharge: 11/08/2010 Employment Status at time of Discharge: Add to Grid

Previous last name/maiden name: Suffix: Date of Last Contact: / /

Status	Name	Occupation	Retire
Employed Part Time (< 35 Hrs)			/ /

Address: 1000 High Street

City: Lincoln State: NE Zip: 68506

Discharge Status:

Legal Status at time of Discharge:

Living Situation at time of Discharge:

Social Supports at time of Discharge:

Discharge Referral:

Phone: Home Phone: (402)698-8888 Primary:  Home Day Phone: (402)698-8888 Ext.   Day Cell Phone: ( ) -   Cell Alternate Phone: ( ) -  Ext.   Alternate Phone Type:

Mental Health Board Disposition:

Destination at Discharge:

Type of Medical Home: Public Clinic (FQHC) Name of Medical Home: People's Health Center

Number of arrests in the past 30 days prior to discharge:

**Substance abuse**

	Age at First Use:	Substance Name:	Frequency of Use:	Volume of Use:	Route:	Last use:
Primary:	<input type="text"/>	Alcohol	1-2 times past week	40 ounces	Oral	10/31/2010
Secondary:	<input type="text"/>	Marijuana/hashish	1-3 times past month	2 cigarettes	Smoke	10/30/2010
Tertiary:	<input type="text"/>	Meperidine (Demerol)	Unknown	3 pills	Oral	07/01/2010

Next

Ready Nextgen Health Clinic kjeangilles CAP NUM SCRL 11/01/2010

# Discharge – Assessment

NextGen EHR: Susan Q Z1Test - [10/29/2010 10:04 AM: "Discharge - Assessment"]

File Edit Default View Tools Admin Utilities Window Help

Logout Save Clear Delete Blue Valley BH Center Provider, Test Patient History Inbox PAQ EPM ICS Close

Alert Discharge Information Assessment

Agency Assigned ID#: BV00125 Admission Date: / / Type of Service: Submit Description of error found:

**Trauma History**

Trauma History:  No  Yes  Unknown

Sexual Abuse  Child  Adult  Both  No  
 Physical Abuse  Child  Adult  Both  No  
 Emotional Abuse  Child  Adult  Both  No  
 Neglect  Child  Adult  Both  No  
 Witness to Domestic Abuse  Child  Adult  Both  No  
 Victim/Witness to Community Violence  Child  Adult  Both  No  
 Physical Assault  Child  Adult  Both  No  
 Serious Accident/Injury  Child  Adult  Both  No

Sexual Assault/Rape  Child  Adult  Both  No  
 Life Threatening Medical Issues  Child  Adult  Both  No  
 Traumatic Loss of a Loved One  Child  Adult  Both  No  
 Victim of a Terrorist Act  Child  Adult  Both  No  
 War/Political Violence/Torture  Child  Adult  Both  No  
 Disasters (Tornado/Earthquake)  Child  Adult  Both  No  
 Sanctuary Trauma (while institutionalized)  Child  Adult  Both  No  
 Prostitution/Sex Trafficking  Child  Adult  Both  No

**Assessment** Add or Update Assessment Add Common Assessment

Date of Diagnosis: / /

Axis:	Assessment:	Code:	Status:
<input type="radio"/> Axis I	Major Depression, Single Episode	296.20	Worse
<input type="radio"/> Axis I	Alcohol Intoxication	303.00	Recurrent
<input checked="" type="radio"/> Axis I	Cannabis Abuse	305.20	Symptomatic
<input type="radio"/>			
<input type="radio"/> Axis II	Borderline personality disorder	301.83	Chronic
<input type="radio"/>			
<input type="radio"/>			
<input type="radio"/>			

**Axis III (reported by patient):**

Diabetes, type II  
 Fatigue

**Axis IV Problems related to:**

Accessing health care  Education  Economic  Housing  
 Legal system/crime  Occupation  Primary support group  
 Social environment  Other Psychosocial and Environmental Problems

**Axis V Global Assessment of Functioning (GAF) Scale**

Current GAF: 55 Date: 10/29/2010

Previous

Ready Nextgen Health Clinic kjeangilles CAP NUM SCRL 11/01/2010

# Nebraska Statewide Telehealth Network



## Nebraska Statewide Telehealth Network Quantitative Evaluation Data September 1, 2009-August 31, 2010

Prepared by DKG Consultants, Incorporated  
Utilizing Information Provided by the NSTN Hub Sites  
Version: December 1, 2010

*A special thank you to the following individuals for their diligent work in gathering and submitting data for preparation of this report:*

*Carol Brandl, BryanLGH Medical Center  
Sally Kummer and Carol Rosenbaum, Faith Regional Health Services  
Wanda Kjar-Hunt and Kathy Gosch, Good Samaritan Hospital  
Brandon Kelliher, Great Plains Regional Medical Center  
Teri Ritterbush and Julia Carlson, Regional West Medical Center  
Steve VanHoosen, Bobbie Parde and Judi Owen, Saint Elizabeth Regional Medical Center  
Vaughn Minton, Saint Francis Medical Center  
Pat Hoffman, University of Nebraska Medical Center  
All NSTN members*

## About This Data

The goal of the Nebraska Statewide Telehealth Network (NSTN) Governing Committee is to gather as much data as possible about how the Network is being utilized. This information is used in many ways including:

- **Reporting usage statistics and value to the Nebraska Public Service Commission (NPSC).** The Nebraska Public Service Commission provides up to \$900,000.00 in funding support annually to members of the NSTN. This funding helps to pay for connectivity costs, routers, bridges and firewall equipment as well as a scheduling system. The data provided to the NPSC and their Commissioners helps to show that their money is well-spent in helping to increase access to health care and education for rural patients and providers.
- **Submitting required performance reports to the Department of Health & Human Services Health Resources and Services Administration (HRSA).** The Nebraska Hospital Association, on behalf of the Nebraska Statewide Telehealth Network, secured nearly \$1.3 million in federal grant funding from HRSA to support NSTN initiatives during the grant fiscal years of 2008-2012. This funding supported the following initiatives:
  - Technical and coordination support for the Network;
  - Replacement of aging and obsolete cameras with high definition equipment at 38 sites;
  - High definition camera and monitor equipment for tele-emergency use at 26 sites;
  - High definition camera and monitor equipment for implementation in approximately 16 physician specialist offices to expand clinical consultation opportunities.

As a requirement for accepting this funding, the NSTN **MUST** submit evaluation data regarding the use of the Network. Grant funding retention as well as future years' funding is contingent upon the data collected. The total amount of data submitted creates a report 141 pages long! This report is submitted twice a year for the duration of the grant.

- **Inclusion of usage statistics in grant applications.** The NSTN is a leader in telehealth with one of the most expansive, comprehensive networks in the country. Federal grant sources are often looking to fund existing collaborations that have a proven track record. Data collected is submitted with grant applications to show that the NSTN is experienced, successful and likely to remain successful in future endeavors and, therefore, a good investment of federal funding. Without this data, it is highly unlikely the NSTN would be able to secure grant funding.
- **Reports to legislators.** The Nebraska Hospital Association, on behalf of the NSTN, secured two congressionally mandated grants, which were supported by Senator Ben Nelson and former Senator Chuck Hagel. Usage statistics are routinely shared with legislators to show the value that the NSTN brings to the state in supporting rural populations.
- **Reports to members.** Organizations, continually under financial pressure, often ask themselves where they can cut costs. Telehealth, not traditionally a revenue producing service, has been questioned by cash-strapped organizations in the past as they consider their future. Data collected from sites can show how telehealth saves money through decreased travel costs in mileage pay and staff down time for education and meetings. In addition, hospitals can look at the clinical consultations their patients receive and ascertain that a certain percentage of those patients likely were able to utilize the local facility for lab, x-ray and other support services while engaging in the clinical consult rather than using the services of another facility.

As the reader can see, the data collected is very important and we thank each and every site that takes the time to submit this data. The NSTN understands that it is nearly impossible to capture 100% of the activity that takes place on the Network as it grows and as it becomes an everyday part of doing business in the organizations. However, we believe this report shows diligence by the sites in collecting and submitting data.



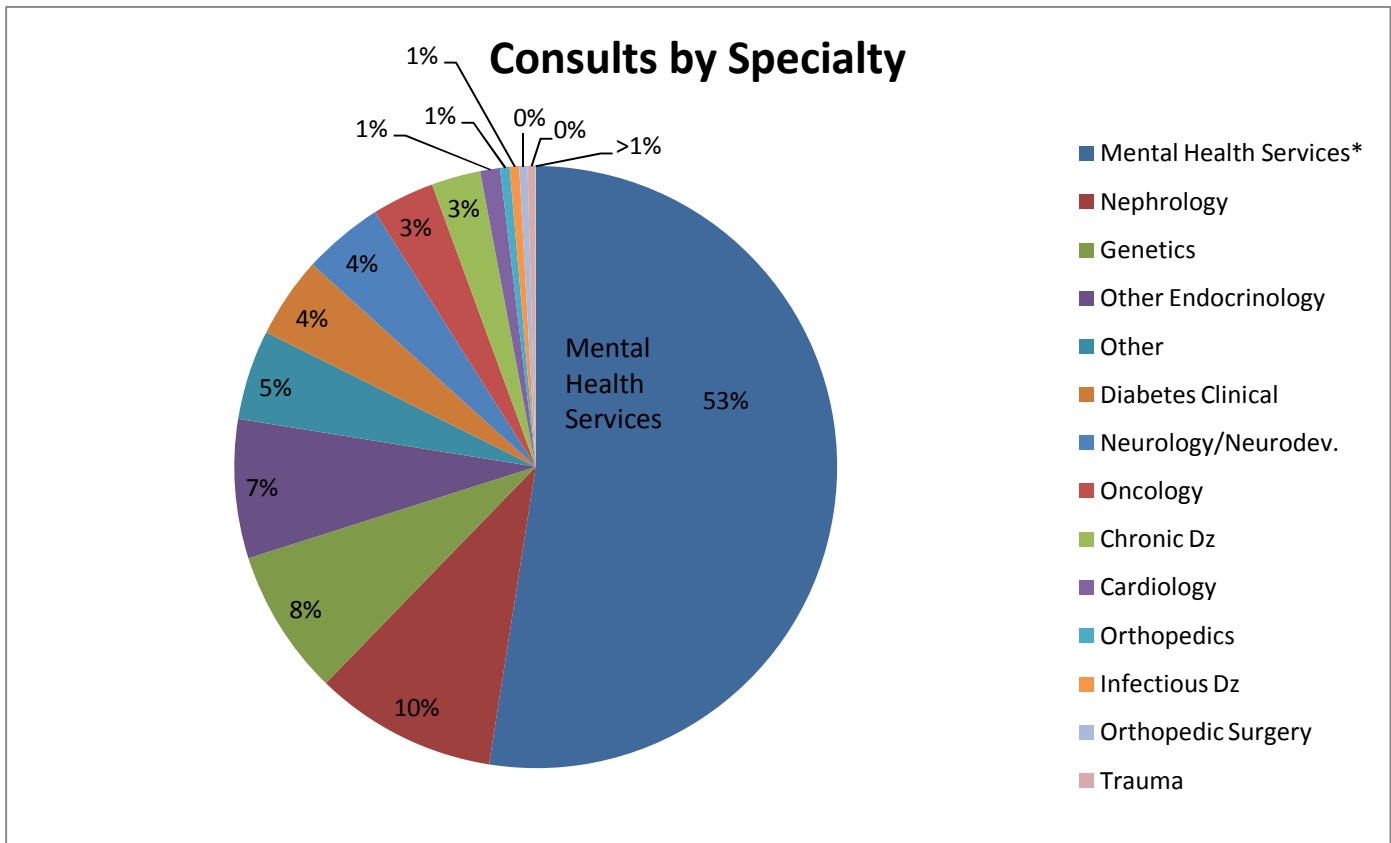
## Clinical Consultations

### Setting, Specialty and Volume of Clinical Consultations

Setting	Type	Sept, 2009- Feb, 2010	March, 2010- Aug, 2010	Total
<b>Emergency Department</b>	Cardiovascular Surgery		1	1
	Trauma	9	1	10
<b>Total Emergency Encounters</b>		<b>9</b>	<b>2</b>	<b>11</b>
<b>Inpatient</b>	Adult Cardiology	2		2
	Infectious Dz	1	9	10
	Mental Health Services*	4	4	8
	Nephrology	1	1	2
	Oncology		1	1
	Orthopedic Surgery		1	1
	Other	2		2
<b>Total Inpatient Encounters</b>		<b>10</b>	<b>16</b>	<b>26</b>
<b>Hospital Outpatient</b>	Adult Cardiology	8	16	24
	Chronic Disease Counseling	36	29	65
	Diabetes Clinical Services	5	102	107
	Genetics and Genetic Counseling	86	91	177
	Infectious Dz		2	2
	Other Endocrinology Services	118	66	184
	Mental Health Services*	364	704	1,008
	Neurology/Neurodevelopmental	43	64	107
	Nephrology	69	170	239
	Oncology	41	41	82
	Orthopedics		13	13
	Orthopedic Surgery	4	6	10
	Other	49	68	117
<b>Total Hospital Outpatient Encounters</b>		<b>823</b>	<b>1,372</b>	<b>2,195</b>
<b>Health Dept./Mental Health Agency</b>	Genetics and Genetic Counseling	2	15	17
	Mental Health Services*	142	138	280
<b>Total Health Department and Mental Health Agency Encounters</b>		<b>144</b>	<b>153</b>	<b>297</b>
<b>Total Clinical Encounters</b>		<b>986</b>	<b>1,543</b>	<b>2,529</b>

\* "Mental Health Services" include any mental, behavioral, psychological, psychiatric or counseling services, including geriatric counseling, that may have been provided.

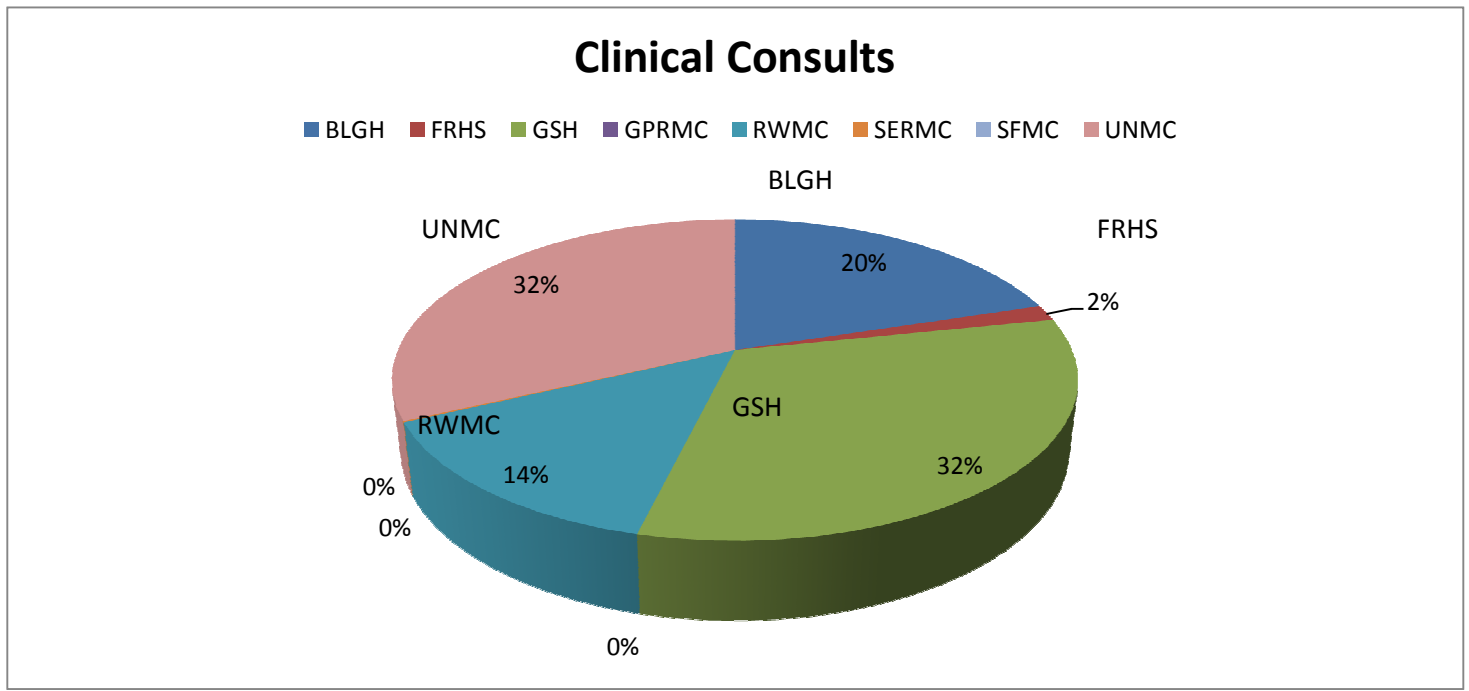
# Clinical Consultations by Specialty



Mental Health Services	1,356	53%
Nephrology	241	10%
Genetics	194	8%
Other Endocrinology	184	7%
Other	119	5%
Diabetes Clinical	107	4%
Neurology/Neurodev.	107	4%
Oncology	83	3%
Chronic Dz	65	3%
Cardiology	26	1%
Orthopedics	13	1%
Infectious Dz	12	>1%
Orthopedic Surgery	11	>1%
Trauma	10	>1%
Cardiovascular Surgery	1	>1%

## Telehealth Clinical Consultations Reported by Individual Hub Site Networks: Total

Network	Sept, 2009- Feb, 2010	March, 2010- Aug, 2010	Total	% of Overall Consults (rounded)
BryanLGH Medical Center Network	184	326	510	20%
Faith Regional Health Services Network	11	29	40	2%
Good Samaritan Hospital Network	407	404	811	32%
Great Plains Regional Medical Center Network	0	0	0	0%
Regional West Medical Center Network	164	193	357	14%
Saint Elizabeth Regional Medical Center Network	1	2	3	.1%
Saint Francis Medical Center Network	0	0	0	0%
University of Nebraska Medical Center Network	219	589	808	32%
<b>Total</b>	<b>986</b>	<b>1,543</b>	<b>2,529</b>	



## Telehealth Clinical Consults by Hub Network: Who is Doing What?

Specialty	Total Number	BLGH	FRHS	GSH	RWMC	SERMC	UNMC
Mental Health Services	1,296	9	1	381	357		608
Nephrology	241	217	24				
Genetics	194			2		1	191
Other Endocrinology	184	184					
Other	119			118		1	
Diabetes Clinical	107	97		5			5
Neurology/Neurodev.	107			107			
Oncology	83			82		1	
Chronic Dz	65			61			4
Cardiology	26	2		24			
Orthopedics	13			13			
Infectious Dz	12		12				
Orthopedic Surgery	11	1		10			
Trauma	10		2	8			
Cardiovascular Surgery	1		1				
<b>Total</b>	<b>2,529</b>	<b>510</b>	<b>40</b>	<b>811</b>	<b>357</b>	<b>3</b>	<b>808</b>

## About the Sites and Practitioners Involved in Telehealth Clinical Consultations

	Sept, 2009- Feb, 2010	March, 2010- Aug, 2010	Other
Total Number of Consultant Sites	7	6	
Total Number of Patient Sites	54*	65**	
Total Number of Consulting Practitioners	47	60	
Total Number of Consultants who Provided Consultations During Both Reporting Periods			35
Total Number of Referring Practitioners	52	57	
Total Number of Referring Practitioners who Referred Patients During Both Reporting Periods			22
Total Number of Specialists Using Telehealth to See Their Own Patients	41	55	

\*This includes 48 Nebraska Statewide Telehealth Network members located in Nebraska and three Kansas sites as reported to HRSA as well as an additional three sites located in the following communities: McAllen, TX; Sioux Falls, SD; and North Bend, WA.

\*\*This includes 53 Nebraska Statewide Telehealth Network members located in Nebraska and three Kansas sites as reported to HRSA as well as an additional nine sites located in the following cities: Denver, CO; Sioux Falls, SD; North Bend, WA; McAllen, TX; Minneapolis, MN; Emmetsburg, IA; Woodbury, MN; Lexington, KY; St. Paul, MN

## About the Patients Involved in Telehealth Clinical Consultations

	Sept, 2009- Feb, 2010	March, 2010- Aug, 2010	Total
Total Miles Saved	175,088	472,539	647,627
Total Financial Savings to Patients in Travel Costs (mileage x \$.505)	\$88,419.44	\$ 238,632.20	\$327,051.64
Total Number of Unduplicated Patients	505*	760*	

\*This indicates the number of unduplicated patients during that six month period.

59 different insurance companies plus Medicare and Medicaid reimbursed providers for telehealth during the grant year.

# Other Uses of the Nebraska Statewide Telehealth Network: Interactions

## Education, Training, Support Groups and Administrative Meetings

	Sept, 2009- Feb, 2010	March, 2010- Aug, 2010	Total
Education for Health Professionals for Degree or Certification Requirements*	663	499	1,162
Other Education for Health Professionals (elective CME)*	65	285	350
Retrospective Case Reviews*	28	50	78
Grand Rounds*	110	100	210
Community Health Education and Support Groups*	54	74	128
Administrative Meetings*	357	548	905
Other	288	171	459
<b>Total</b>	<b>1,565</b>	<b>1,727</b>	<b>3,292</b>
Total Number of Sites Involved in Offering or Receiving Services	99	109	
Total Number of Participants Involved in Receiving Services	18,303	18,118	36,421
Total Miles Saved	685,025	1,069,440	1,754,465
Total Financial Savings to Organizations in Mileage Costs (miles x \$.505)	\$345,937.63	\$540,067.20	\$886,004.83
Total Estimated Financial Savings to Organizations in Staff Travel Costs (Estimated Travel Time x \$25.00/hour)	\$315,575.00	\$478,809.50	\$794,384.50

\*A description of these categories is provided at the end of this document.

## Informal Supervision and Mentoring\*: Interactions

Individual Being Supervised	Sept, 2009- Feb, 2010	March, 2010- Aug, 2010	Total
LMHP/PhD		15	
PMHP		15	
MA		5	
PLMHP		5	
<b>Total</b>		<b>40</b>	

\*A description of this category is provided at the end of this document.

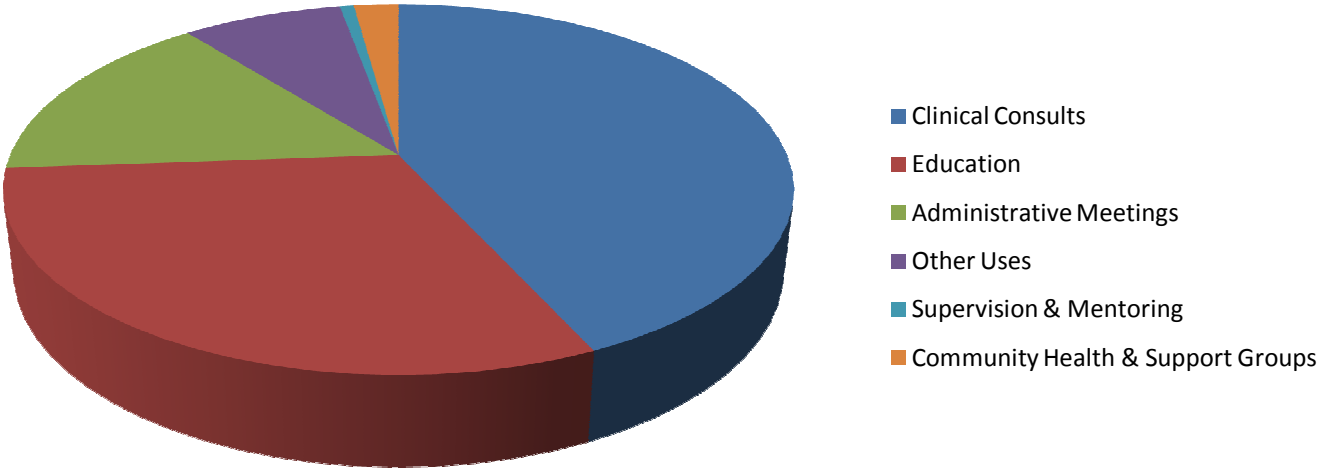
## Biometric Monitoring\* Interactions Utilizing Telehealth Lines

	Sept, 2009- Feb, 2010	March, 2010- Aug, 2010	Total
Teleradiology	1,446	2,603	4,049
Telemetry	530	524	1,054
<b>Total</b>	<b>1,976</b>	<b>3,127</b>	<b>5,103</b>

\*A description of this category is provided at the end of this document.

**Overall Videoconference Usage**

**Videoconference Usage of the  
Nebraska Statewide Telehealth Network**



<b>Total Number of Interactions*:</b>	<b>5,861</b>	<b>100%</b>
Clinical Consults:	2,529	43%
Educational Offerings:	1,800	31%
Administrative Meetings:	905	15%
Community Health & Support Groups:	128	2%
Other Non-Categorized:	459	8%
Supervision and Mentoring:	40	1%

*\*These numbers do not reflect biometric monitoring interactions.*

## Description of “Other Uses”

**Administrative Meetings.** Administrative meetings, for the purpose of this document, are defined as meetings of one or more organizations or individuals held for the purpose of advancing the core business practices of the participating organization.

**Biometric or Remote Monitoring.** As defined by the American Telehealth Association, remote patient monitoring (RPM), or telemonitoring, describes services where a patient’s vital signs (e.g., blood pressure, weight) and other biometric data (e.g. pulse oximetry, blood glucose levels) and subjective data (e.g. disease signs and symptoms, medication and/or diet compliance) is collected by monitoring devices and transferred electronically to a clinician (provider, nurse or allied health professional) who analyzes, responds and stores the data.

**Community Health Education.** Health education provided to members of the community by a health care professional or other affiliated entity or individual.

**Community Support Groups.** Community support groups are designed to provide assistance to individuals in managing the physical, emotional and psychological implications of their health conditions in a group environment with professional or layperson facilitation.

**Grand Rounds.** Grand rounds are formal meetings at which physicians discuss the clinical case of one or more patients, usually focusing on current or interesting cases. Grand rounds are an integral component of medical education for students and practicing providers.

**Informal Supervision and Mentoring.** Telehealth allows a practitioner at one site to oversee or mentor (1.) students or trainees involved in formal educational programs or (2.) practitioners who may occasionally require supervision from physicians or other more senior specialists while allowing them to practice in remote areas. This allows individuals interested in practicing in rural areas to gain experience while serving these communities. This supervision may be truly informal or may be required by professional practice regulations.

**Retrospective Case Reviews.** A retrospective case review is a post-treatment assessment of services on a case-by-case or aggregate basis after the services have been performed.

## Telehealth Stories: Helping to Heal the Whole Patient

When attempting to judge the success of telehealth and determine Return-on-Investment, quantities are important. How much time did we save? How much money? How many patients were seen? How many physicians believed in the value of telehealth enough to use it? The quantitative outcomes help tell the Nebraska Statewide Telehealth Network if it is progressing in the right direction. As the NSTN embarks upon the study of clinical outcomes in the future, this information will serve an even greater function – not only will it tell us if telehealth improved access, but if telehealth improved care. Did it help save a life? Will a family have more years together than they would have if telehealth did not exist? Clinical outcomes are complicated and additional research will be needed.

In the meantime, those who are involved in telehealth look for moments when they can say, “That’s it. That is why we are here.” Moments in which they see a patient or a family flourish because they have access to telehealth. As everyone is aware, healing a patient involves many aspects of care – physical, mental, emotional and spiritual. In this evaluation, the NSTN wishes to share some of the moments in which telehealth was employed to bring all of these aspects of care together to heal both patients and their families

### **Helping a Heart Patient be there for the Important Events**

In a story shared by the University of Nebraska Medical Center, Information Technology Associate Chris Hanna discusses Rocky Lee, a patient who received a heart transplant and a hospitalization that would keep him from attending his



daughter's high school graduation. Utilizing mobile videoconferencing technology between his room at UNMC and the Fairbury High School, Rocky was able to watch his daughter graduate. "Seeing her graduate was a milestone for me," Rocky said. "She's given up so much of the last six months to take care of me. She put her life on hold. I couldn't be more proud of her and this connection helped me to be there as much as I could. Everyone [at UNMC] was so great to help make this happen. I can't put into words how much this meant to me."

### **Helping Vulnerable Patients Receive Care without Compromise**

After undergoing orthopedic surgery, a 93 year old patient went to her daughter's home to recover. Her surgeon needed to see her for post-operative follow-up visit two weeks later; however he was convinced that having this vulnerable patient make a five-hour round trip was probably not in her best interest. Having never been involved in telehealth, the surgeon decided to give it a try to save his patient onerous travel. The end result: the surgeon delivered optimal care in a way that was most appropriate and compassionate for his patient and she was able to receive the care in comfort.

### **Giving a Daughter Trust in her Father's Health Care Provider**

One of Good Samaritan Hospital's oncologists was caring for a patient in a distant rural community for follow-up and chemotherapy management. The man's daughter was a registered nurse working in another, more populous state. Understandably worried, she made it clear that she didn't fully trust the care her father was receiving. By utilizing telehealth technology, Good Samaritan Hospital was able to bring the daughter into a conference where she could interact with the oncologist and her parents at the same time. Her ability to be part of this appointment increased her trust of healthcare in rural Nebraska.

### **Improving the Continuum of Care for Trauma Patients**

Nebraska currently has over 75 hospitals wired to provide tele-emergency care. This technology allows a video and audio connection between local practitioners caring for the complicated patient presenting to the emergency department and tertiary care centers, creating the environment for improved continuum of care for the patient who may eventually travel between the centers for advanced care, giving the local provider another set of eyes and the tertiary care provider a first look at the patient he or she may eventually accept.

Good Samaritan Hospital tells the story of a middle-aged patient who had been working in the field when he was shoved into a fence by a cow. Short of breath, he presented to the hospital where initial x-rays showed a tension pneumothorax, a dangerous condition in which air fills the chest cavity due, in this case, to a traumatic blow. The physician assistant on duty wasn't entirely confident in performing chest tube insertion independently; however, the procedure needed to be done to save his life. Tele-emergency allowed a physician at the tertiary care center to confirm that the physician assistant had the right landmarks for insertion while she awaited arrival of the local physician. The local physician arrived just in time to assist. The chest tube was placed and the patient was successfully transported alive to Good Samaritan Hospital.

***The NSTN Evaluation Subcommittee knows that there are many stories left unspoken about how telehealth has touched lives. The NSTN welcomes and encourages these stories to be shared at any time. Help the Nebraska Statewide Telehealth Network tell its story!***

*For more information about the Nebraska Statewide Telehealth Network or this document, please contact Laura Meyers, Grant Project Manager, DKG Consultants, [laurameyers@charter.net](mailto:laurameyers@charter.net) or a member of the Governing Committee.*

*Thank you!*