Southeast Minnesota Beacon Community

Harnessing Technology From a Community Perspective

March 2, 2012   National Health Policy Forum
SE Minnesota Beacon Program
Working Together to Improve Health Care

11 Counties &
Local Public Health Depts.
47 School Districts

- Allina
- Olmsted Medical Center
- Mayo Clinic
- Mayo Clinic Health System
- Winona Health
- Outside Beacon Network
Guiding Values

Ensuring the values and preferences of informed patients are brought into our program through meaningful conversation.
Community Engagement / Qualitative / Focus Groups

Identify perceived needs and potential barriers related to each Beacon project initiative
(i.e. the wide spread use of asthma action plans for school children.)

Groups of interest:
- Parents of school aged children
- Public health, School nurses & population care managers
- Physicians / nurses who provide health care
- Community leaders

Settings
- Convened where the groups of interest are located
- Professional moderators
- Relaxed atmosphere with a constructive
t

Focused discussions: Participants have privileged seats at the table
IT Enabled & Community based ‘Transitions of Care’

Provider Portal for Patients

QoL & Decision Aids

SE MN Beacon Use Cases

School Portal & NwHIN Gateway

Provider NwHIN Gateway

Public Health NwHIN Gateway

Provider Public Health NwHIN Gateway

NwHIN Gateway
Technology Milestones

• Meaningful Use (MU)
• Health Information Exchange (HIE)
• Continuity of Care Documents (CCD)
• Other Document Exchange:
  – Asthma Action Plan (AAP)
  – Diabetes Quality of Life Tool (QOL)
  – Diabetes Decision Aids
• Reverse integration of immunizations into EMR
• Portal/Patient Engagement
• School Portal
Peer-to-Peer HIE

- 100% EHR Adoption Rate:
  - Six EMR systems used across SE MN Beacon including PH-Doc used by Public Health
- NwHIN Connectivity
- CCD’s parsed into discrete data and persisted

Clinical Data Repository

- Hosted at Regenstrief Institute
- Site Clinical Repository
- Research Data Repository
- Population Management

- Quality Measures Reporting
- Research
- Population Management
- Error handling
- Point of Care (Future Use)
Demonstration at Interoperability Showcase
HIMSS, ONC/FHA Innovation Area

Demonstrated scalable peer-to-peer HIE to exchange of CCD/Asthma Action Plans among the organizations; CCD consumption and parsing by Public Health for medication reconciliation.

ROCHESTER, Minn. — Medical records are an invaluable tool in treating patients. When a caregiver has ample information regarding a patient's medical history, treatments are more effective and efficient. Unfortunately, few people have complete medical records — due, in large part, to a lack of any universal repository tools for keeping those records. Mayo Clinic, along with its partners in a program called the Southeast Minnesota Beacon Community, is working on solutions to this problem. They are showcasing their work through demonstrations at the 12th annual Healthcare Information and Management Systems Society Conference & Exhibition (HIMSS), from Feb. 20 to 24 in Las Vegas.

In May 2010, southeast Minnesota was one of 17 areas nationwide selected for funding by a U.S. Department of Health and Human Services initiative called the Beacon Community Program. The initiative sought to fund health care entities looking for ways to use technology to improve the efficiency and delivery of health care while cutting costs. The Southeast Minnesota Beacon Community was created through collaboration among Mayo Clinic, Mayo Clinic Health Systems, Olmsted Medical Center, Winona Health, Alliance Hospital Owatonna, and 11 county public health departments in the region. Now, less than two years after receiving funding, the group has been asked to share its work at the HIMSS Conference, using technology and processes it developed to show how health information can be transferred between its member institutions in real time. Two scenarios are being showcased at demonstration kiosks in the HIMSS exhibition hall.

Legalities

1. Data Use Agreement with data repository vendor
2. Data repository source code license
3. Business Associate Agreements between
   a. Beacon participants and data repository
   b. between or among Beacon participants
4. NwHIN (Nationwide Health Information Network)/CONNECT vendor
5. Certificate of Authority:
   • Health Information Exchange
   • Health Data Intermediary
   • Record locator service

24 JD’s
Privacy Legislation

- Health Insurance Portability and Accountability Act (HIPAA)
- Family Educational Rights and Privacy Act (FERPA)
- Public health agency - state Data Practices Act
- Minnesota Research Authorization

Consent and Authorization
1. Establish consent or authorization requirements for exchange of protected health information between or among Beacon participants.
   a) Exchanges among related health care entities when necessary for current treatment.
   b) In a medical emergency.
   c) To a health facility if the patient is returning and unable to provide consent.
   d) Duration of consent
2. For use of medical records for research purposes.
   a. Minnesota Research Authorization statute
   b. Federal protection of human subject research regulations
New Model: Asthma Care Coordination

Includes processes of care coordination with providers, public health and schools
# New Model: Diabetes Medication Choice

<table>
<thead>
<tr>
<th>Weight Change</th>
<th>Daily Routine</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metformin</strong></td>
<td><strong>Metformin</strong></td>
</tr>
<tr>
<td>None</td>
<td>8 AM, 5 PM</td>
</tr>
<tr>
<td><strong>Insulin</strong></td>
<td><strong>Insulin</strong></td>
</tr>
<tr>
<td>4 to 6 lb. gain</td>
<td>8 AM, 5 PM OR 8 PM</td>
</tr>
<tr>
<td><strong>Glitazones</strong></td>
<td><strong>Glitazones</strong></td>
</tr>
<tr>
<td>More than 2 to 6 lb. gain</td>
<td>8 AM</td>
</tr>
<tr>
<td><strong>Exenatide</strong></td>
<td><strong>Exenatide</strong></td>
</tr>
<tr>
<td>3 to 6 lb. loss</td>
<td>8 AM, 5 PM</td>
</tr>
<tr>
<td><strong>Sulfonylureas</strong></td>
<td><strong>Sulfonylureas</strong></td>
</tr>
<tr>
<td>2 to 3 lb. gain</td>
<td>8 AM, 5 PM</td>
</tr>
<tr>
<td><strong>Glitins</strong></td>
<td><strong>Glitins</strong></td>
</tr>
<tr>
<td>None</td>
<td>8 AM, 5 PM</td>
</tr>
</tbody>
</table>

http://webpages.charter.net/vmontori/Wiser_Choices_Program_Aids_Site/Diabetes_Choice_files/diabetes.html
Patient Reported Outcomes / Quality of Life Tool

please touch the picture that corresponds to your single biggest concern right now...

- personal relationships: Family, Friends
- monitoring health: Testing blood sugars, Checking feet
- emotional health: Sad, Anxious, Other emotional concerns
- money: Cost of medicine or supplies, Paying for care
- health behaviors: Diet, Exercise, Sleep
- medicine: Taking medication, Managing side effects
- healthcare: Health insurance, Emergency/Urgent care
- work: Schedule, Environment, Managing your health condition at work
- physical health: Pain, Fatigue, Physical difficulties
- something else

Beacon Community Program
The Office of the National Coordinator for Health Information Technology
Additional Models of Care in SE MN Beacon

- Telemedicine Models in branch clinics, long-term care facilities, & schools.
- School-based Flu Clinics
- Admission & Discharge transitions of care (hospital/public health)
Southeast Minnesota Beacon Program

Welcome to Beacon

Beacon is a community-based program to spotlight a variety of “best practice” approaches to improving health and health care delivery in the United States. Funded by the U.S. Department of Health and Human Services, through the Office of the National Coordinator for Health Information Technology, the Beacon Communities are a series of medical practice and research coalitions focusing on specific health conditions in their areas and utilizing and developing efficient systems based on their foundational expertise.