



The Office of the National Coordinator for
Health Information Technology



Southeast Minnesota Beacon Community

Harnessing Health IT From a Community Perspective

Lacey A. Hart, MBA, PMP®

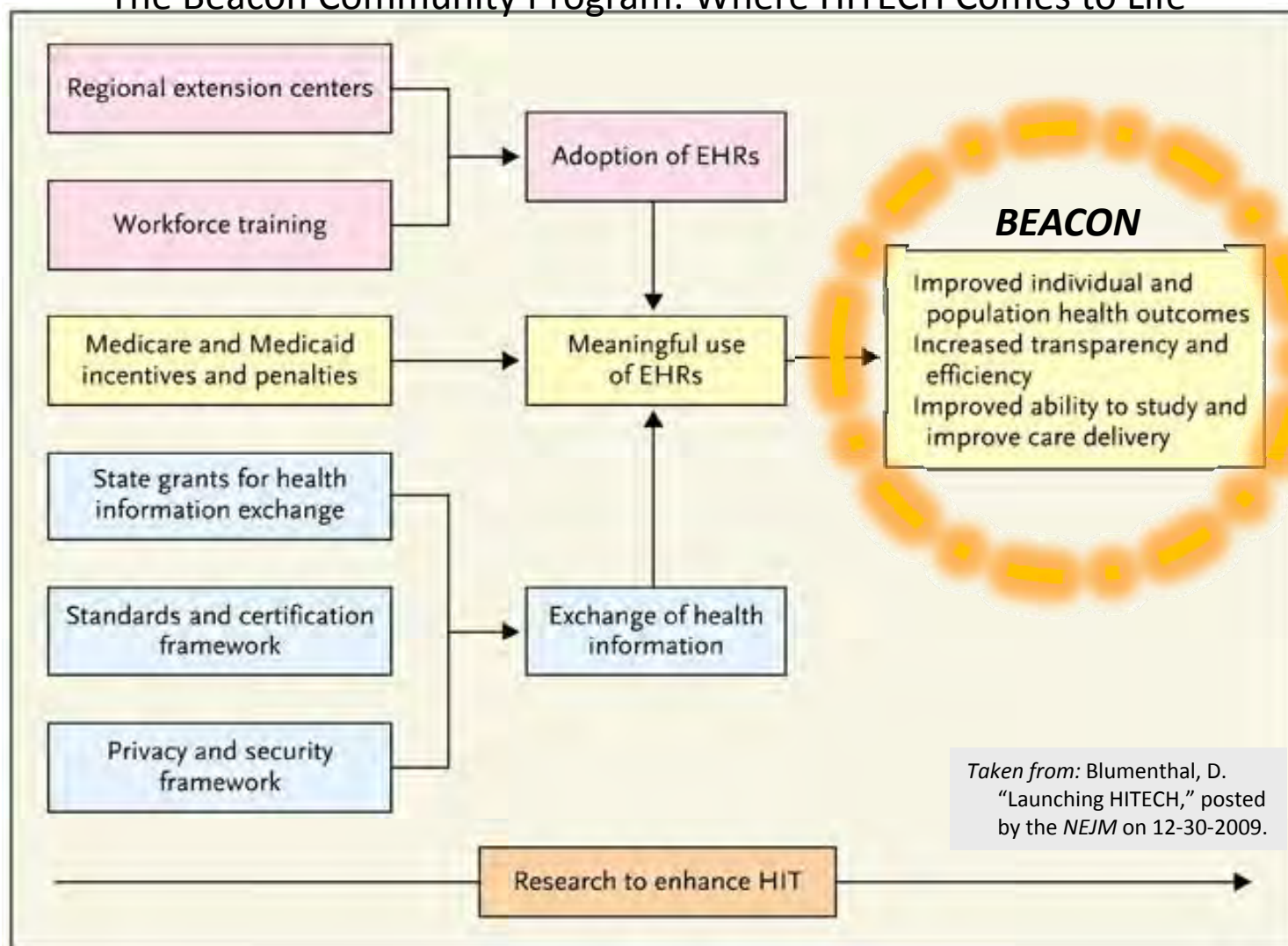
Putting the **I** in **HealthIT**
www.HealthIT.gov



The Beacon Community Program: Where HITECH Comes to Life

Putting the I in HealthIT
www.HealthIT.gov

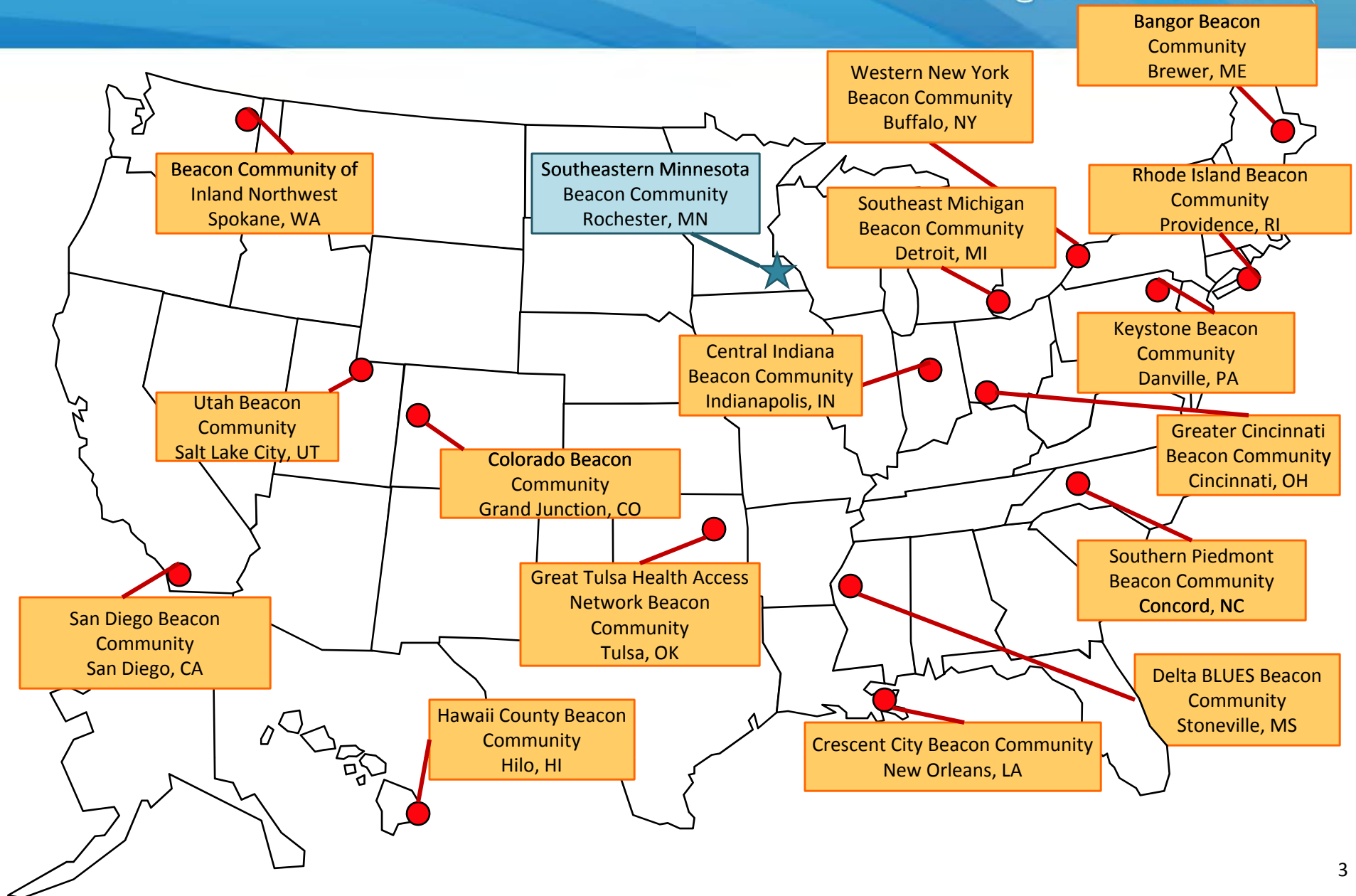
The Beacon Community Program: Where HITECH Comes to Life



Taken from: Blumenthal, D.
"Launching HITECH," posted
by the NEJM on 12-30-2009.

17 Beacon Communities

Putting the **I** in Health **IT**



Beacon Community Aims

Putting the I in HealthIT 
www.HealthIT.gov

17 grantees each funded ~\$12-15M over 3 yrs to:



Build and strengthen health IT infrastructure and exchange capabilities - *positioning each community to pursue a new level of sustainable health care quality and efficiency over the coming years.*



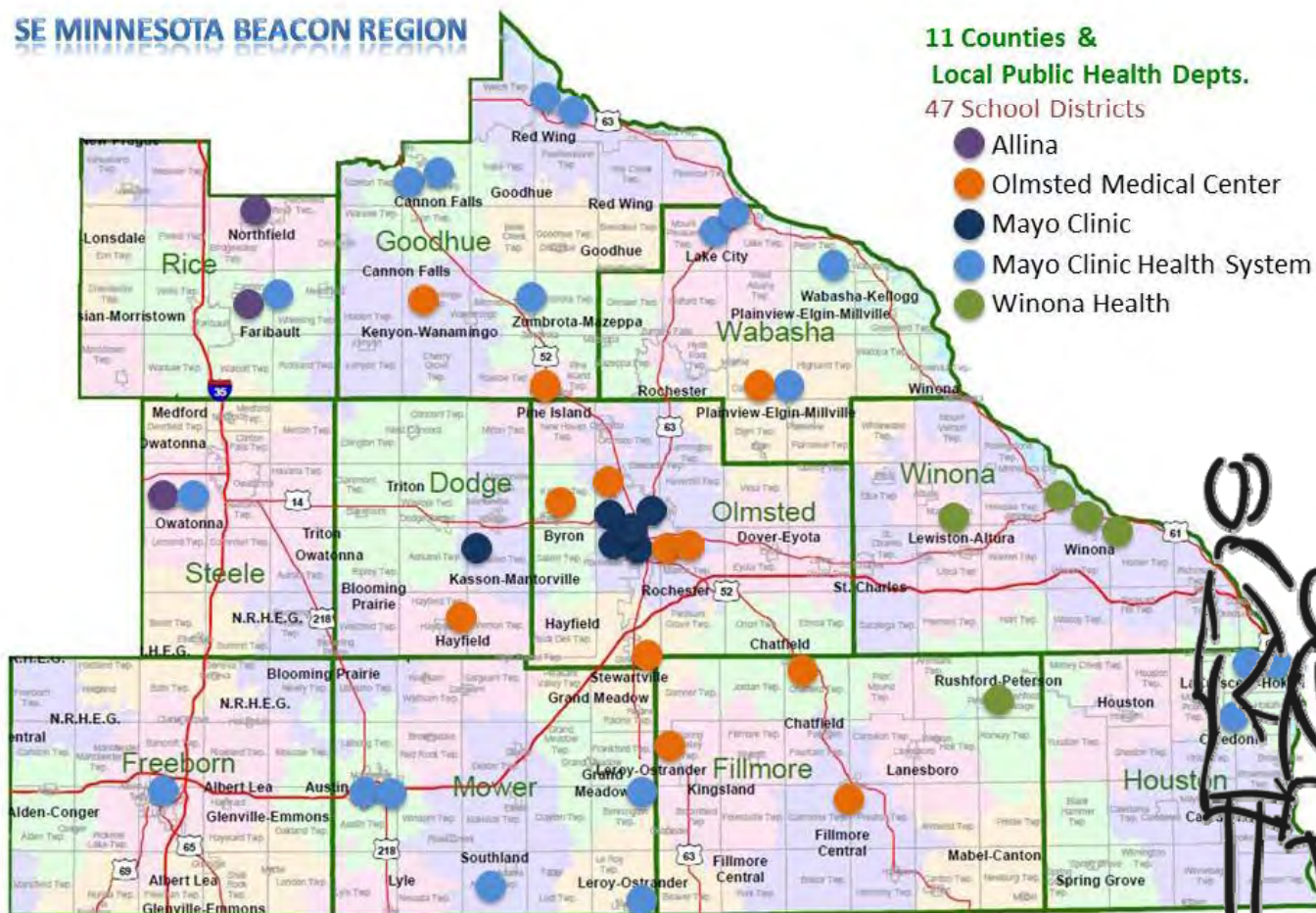
Improve cost, quality, and population health - *translating investments in health IT in the short run to measureable improvements in the 3-part aim.*



Test innovative approaches to performance measurement, technology integration, and care delivery - *accelerating evidence generation for new approaches.*



SE MINNESOTA BEACON REGION



Community of Practice focusing upon delivering High-value community-based care delivery model





Communities of Practice

- Allina Health
- Mayo Clinic Health System
- Mayo Clinic
- Olmsted Medical Center
- Winona Health

11 Public Health Departments
Dodge, Fillmore, Freeborn, Goodhue,
Houston, Mower, Olmsted, Rice, Steele,
Wabasha, Winona

**147 school districts in the 11
counties in SE MN**
Home health facilities and
nursing homes

3 Levels of Exchange Partners

- Valuable Health Data
- Robust Infrastructure Capacity
- Meaningful Use Funding

- Valuable Health Data
- Limited Infrastructure Capacity
- No Meaningful Use Funding

- Valuable Health Data
- Limited Infrastructure Capacity
- No Meaningful Use Funding

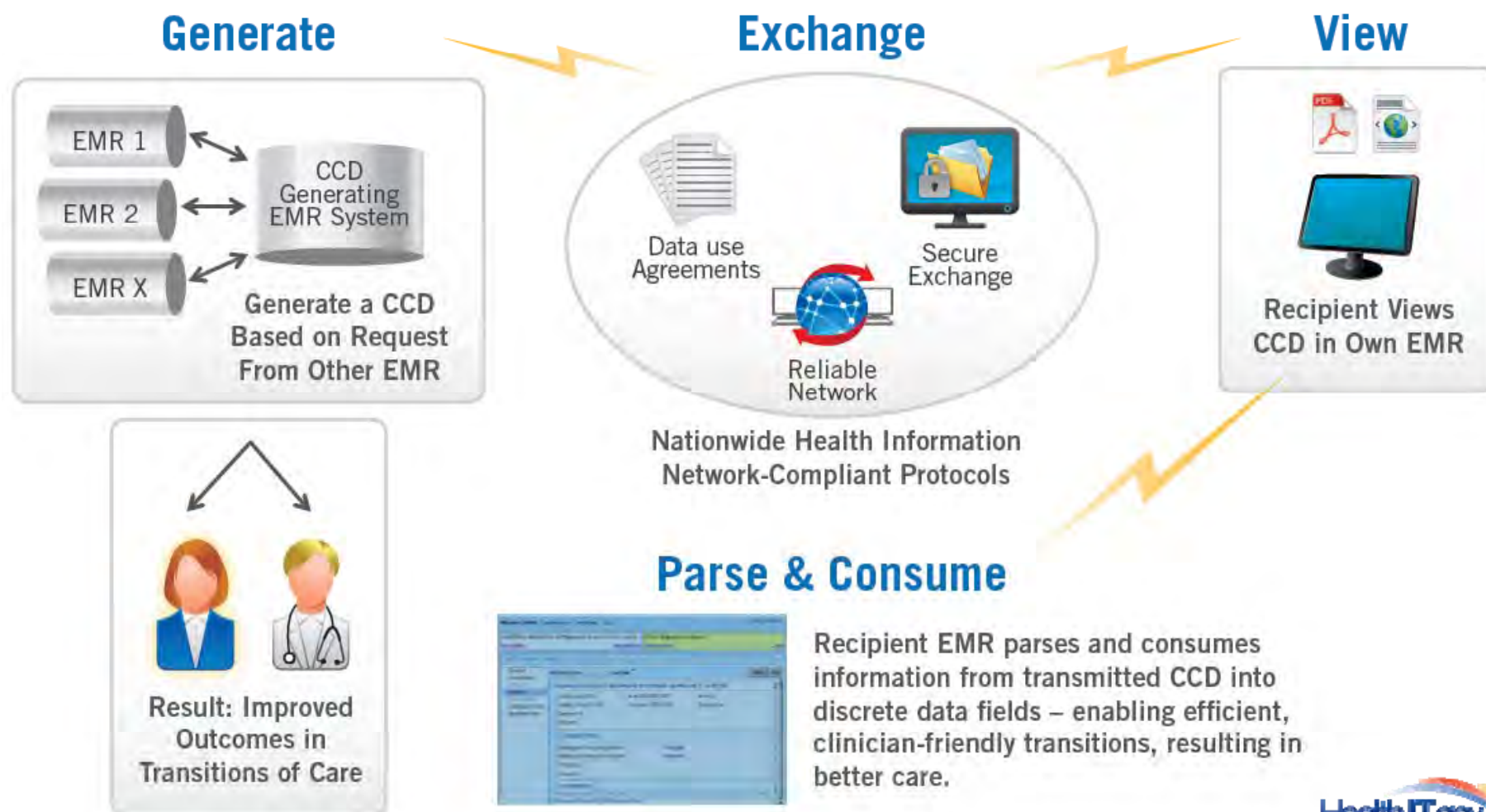
Guiding Values

Ensuring the values and preferences of informed patients are brought into our program through meaningful conversation.



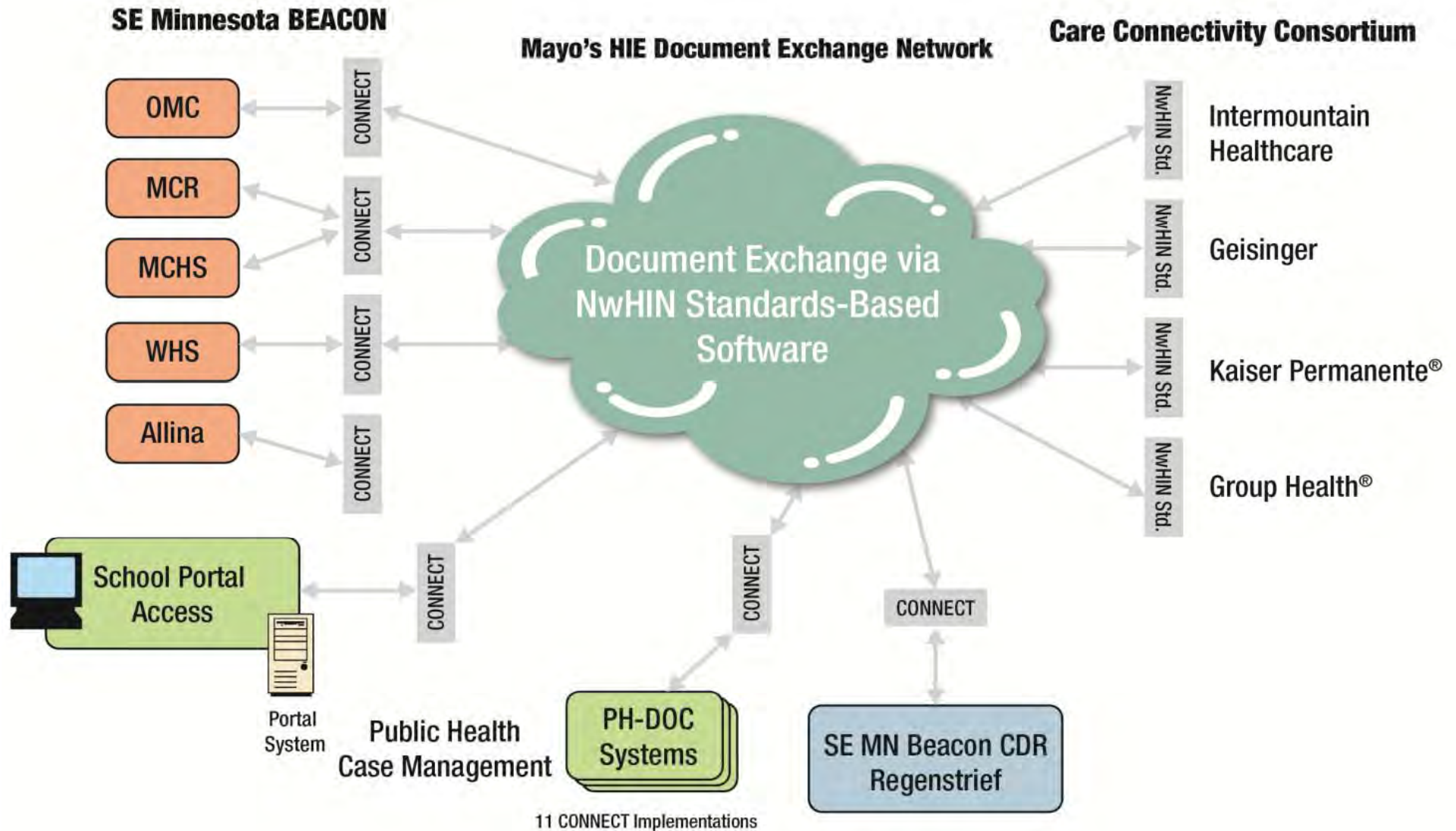
The SE Minnesota Beacon challenges the traditional healthcare models in our nation from provider centric to ***patient-centric and community driven***. This commitment is woven into the very fabric of each project in our program.

Peer – to – Peer HIE

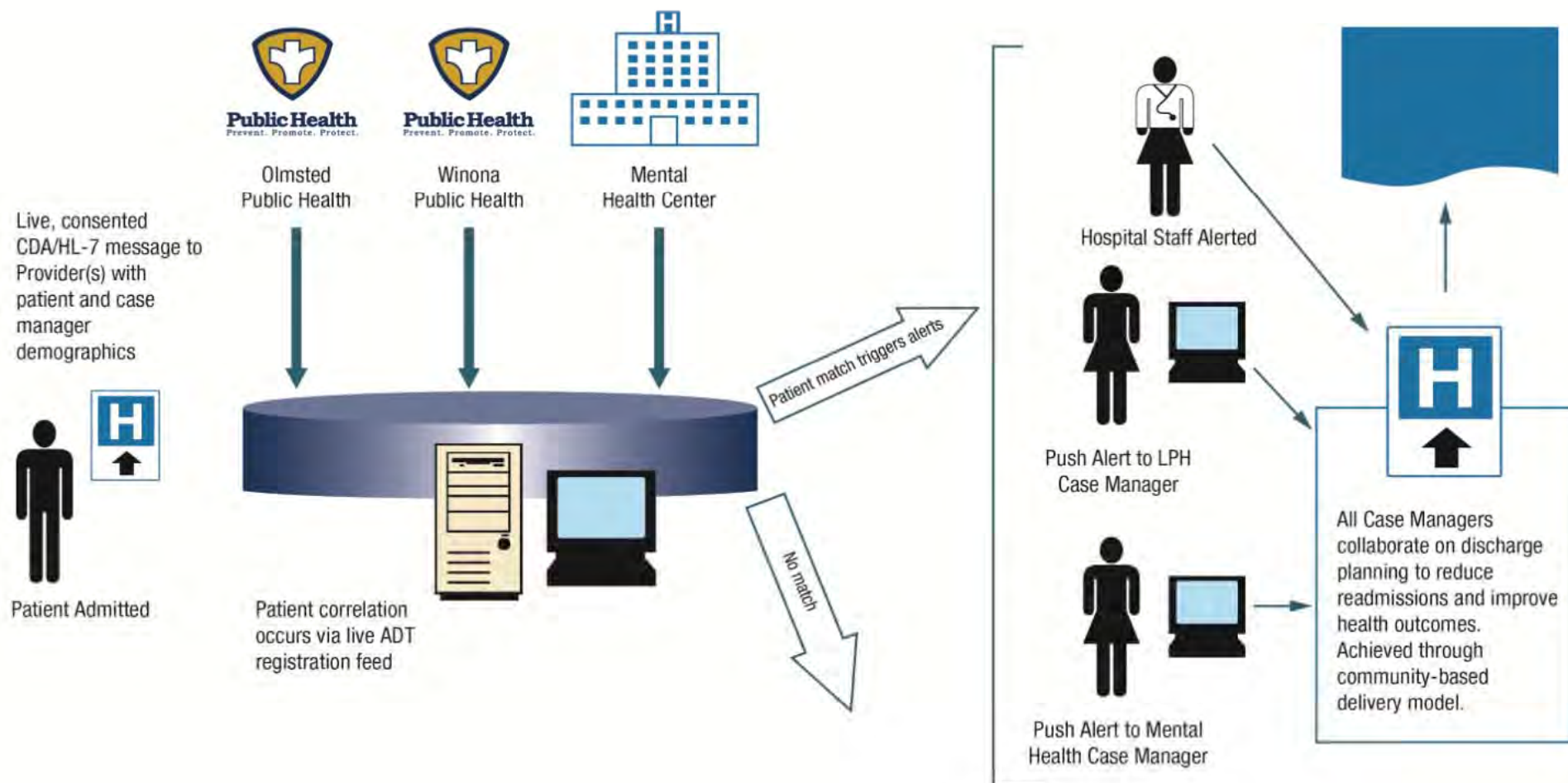




Network Collaboration



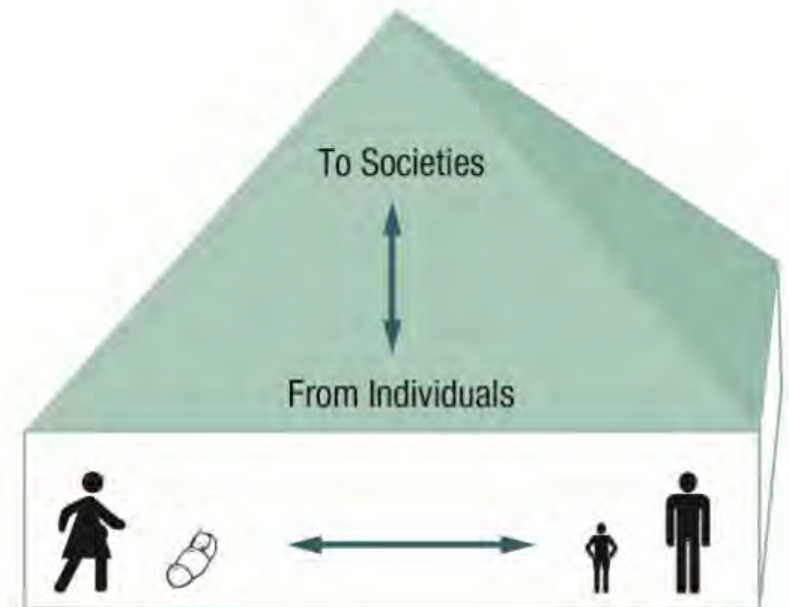
Transitions of Care





Clinical Data Repository *'aka Community Data Repository'*

- Hosted at Regenstrief Institute
- Site Clinical Repository
- Population Management
- Quality Measures Reporting
- Point of Care (Future Use)





CDR: Current Approved Use



Queries database
using i2b2 tool

- Quality Measure Reporting
- Population Management
- Research

i2b2 enables powerful search logic, including



Simple queries:
64,069 patients in
<15 seconds

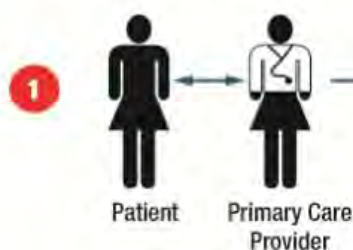


Complex queries:
(A or) and (c) HF or CAD and
BP < 130: 21,927 patients
in 10 seconds



**CDR: Future Cases
Transitions of Care
CareWeb**

Data from patient's other
providers also accessible
to database



Database locates additional records
and delivers to hospital EHR

EMT queries
database

Database delivers
record abstract
w/key information

2 Patient is injured and is
unconscious. EMT uses
CareWeb to query
database for patient info
from ambulance



CareWeb quickly
locates patient and
delivers record
abstract with essential:

- Current meds
- Med allergies
- Vitals
- Problem list

PCP sees patient at local clinic.
PCP documents:

- Problem list (current diagnoses)
- Med list
- Med allergies
- Vitals
- Labs
- Demographics
- Etc.



4 Patient receives informed
care and recovers quickly

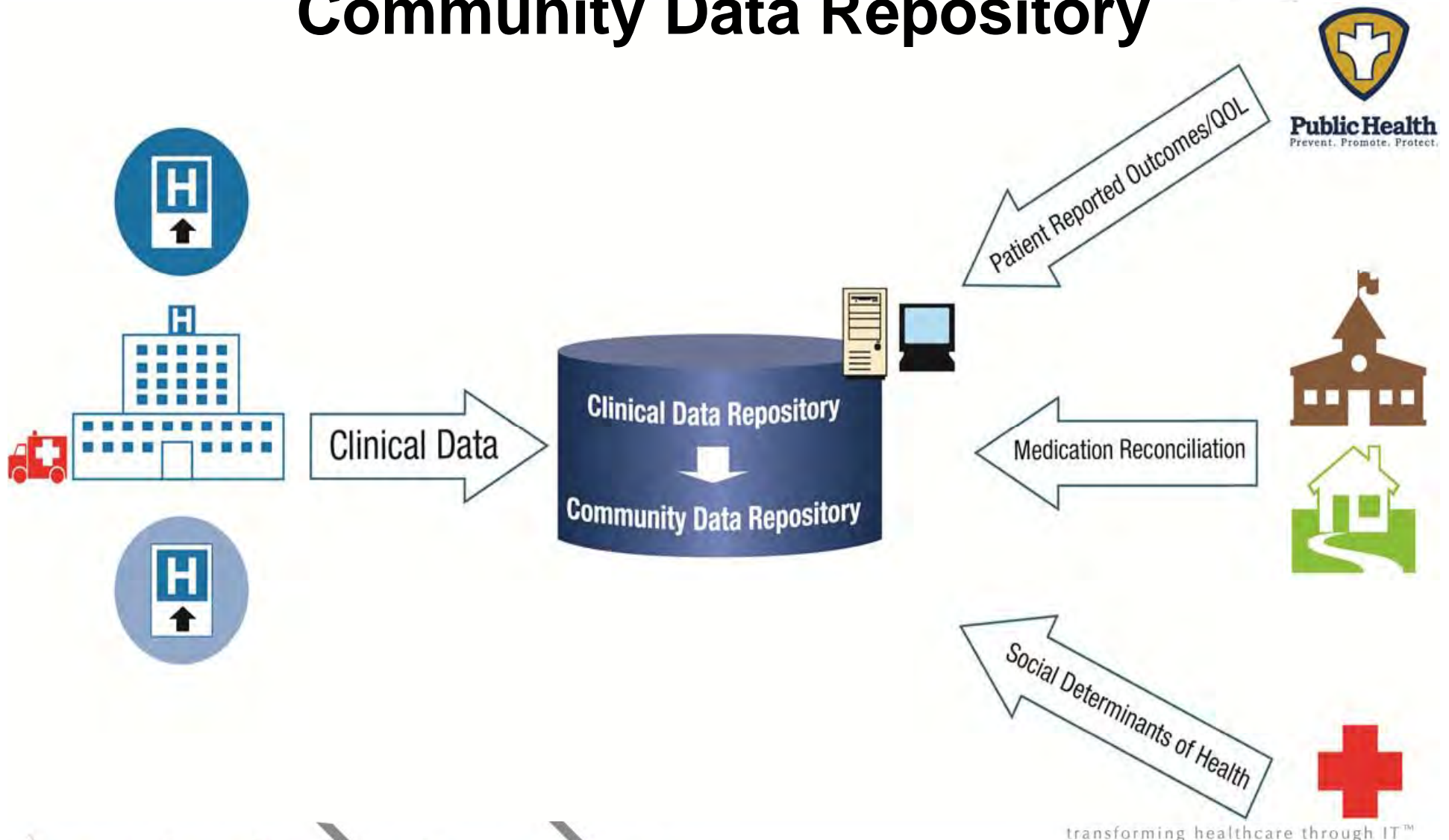


3 In hospital, provider can use CareWeb to query further
viewing more record details and additional records
from specialists, to get more information about patient

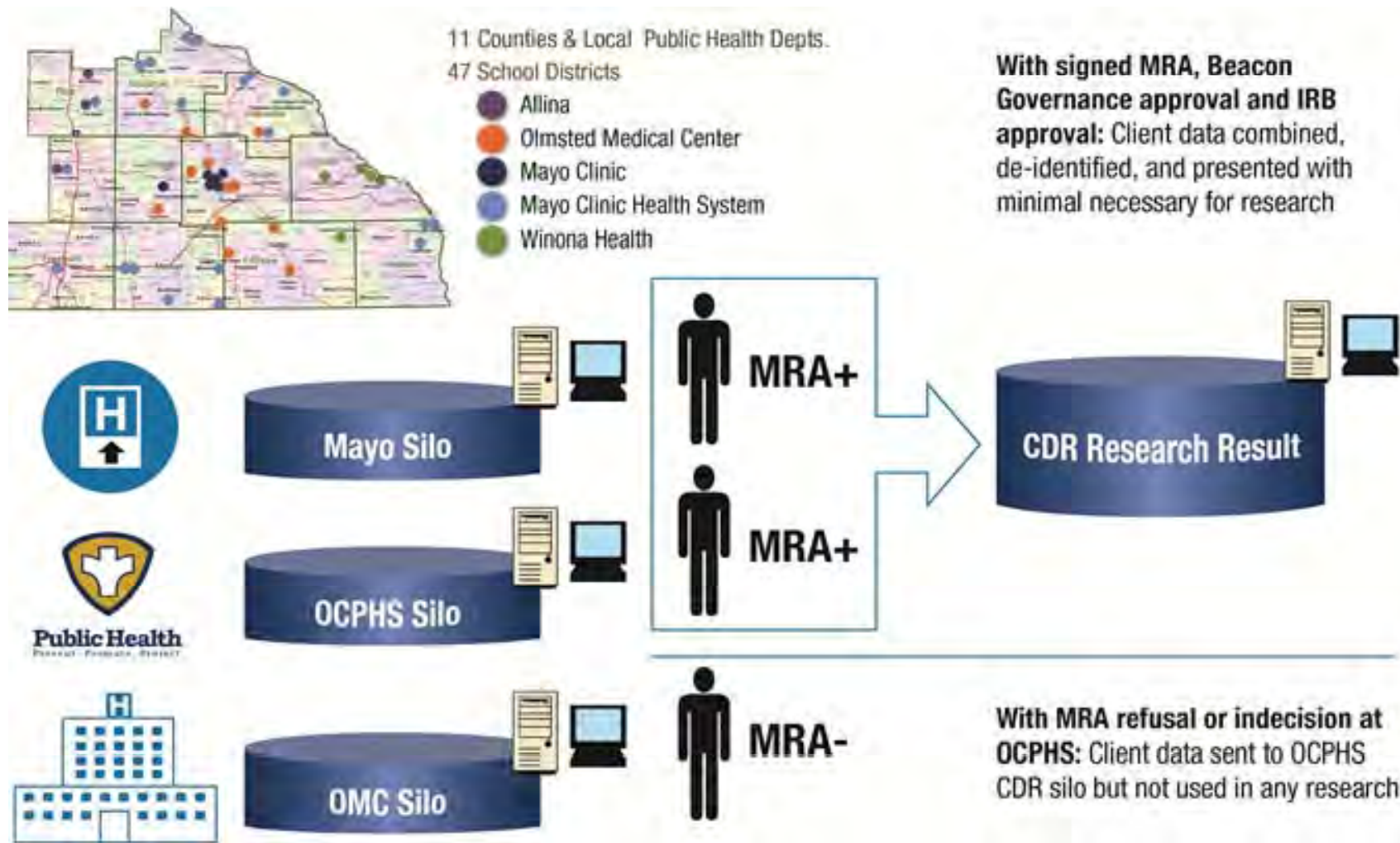
Provider sees
additional information
on hospital EHR

Patient arrives at hospital in stable
condition, since CDR provided essential
information for proper care during transit
transforming healthcare through IT™

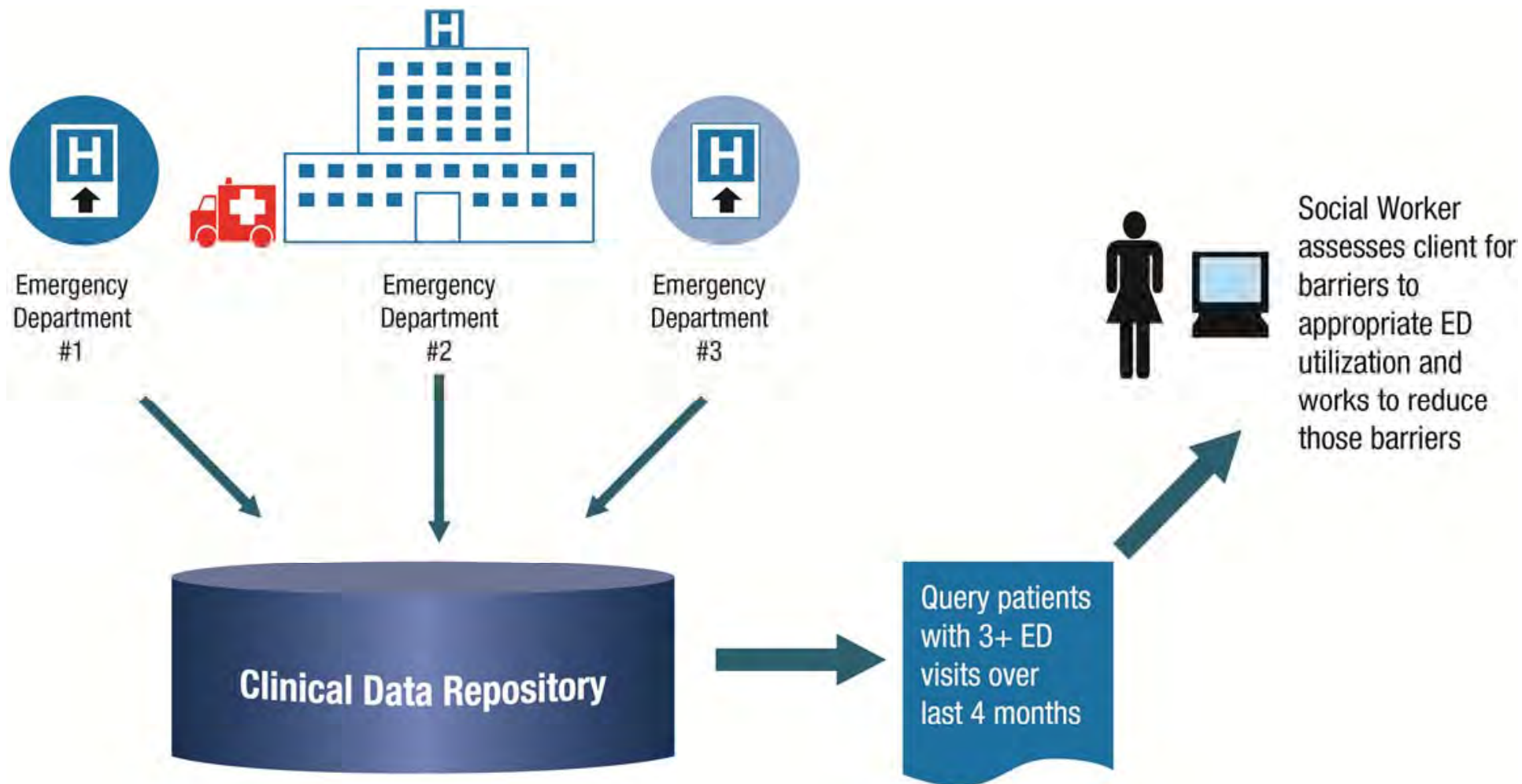
Community Data Repository



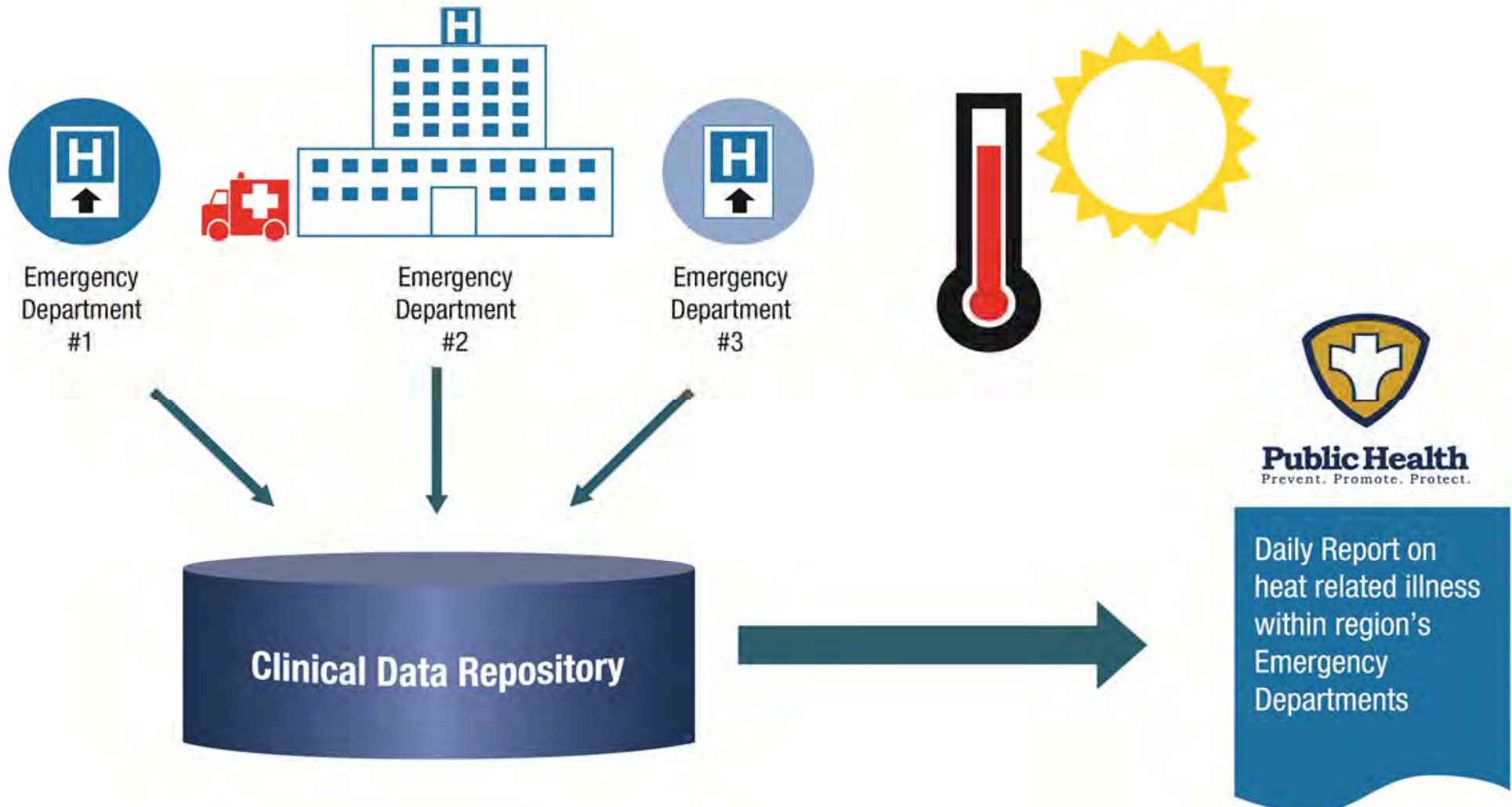
Minnesota Research Authorization (MRA)



In-Reach Social Worker

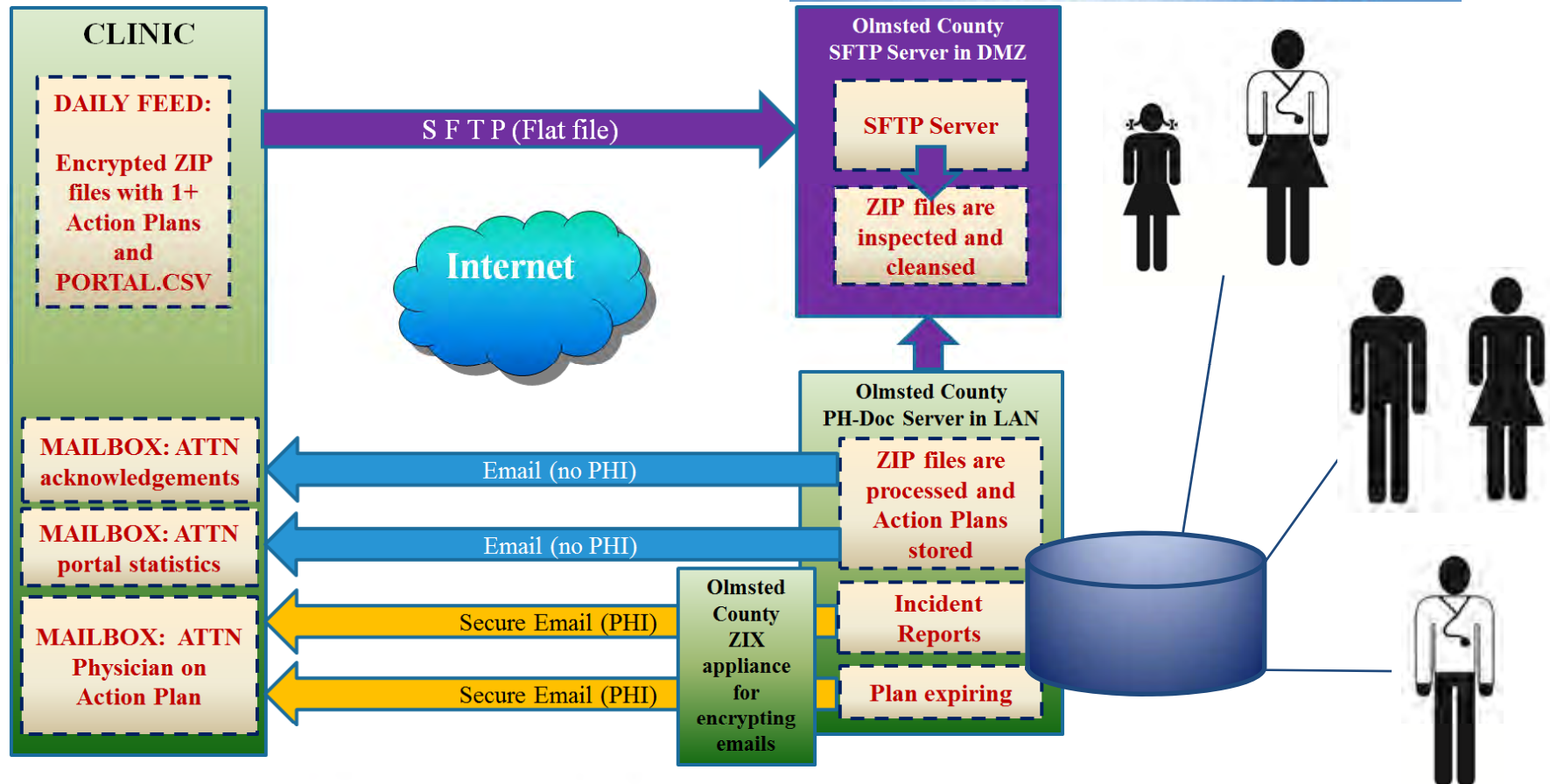


Public Health Surveillance



School Portal

Exchange of Care Plans



Asthma 'Cocoon of Care'

Care Coordination between parents providers public health & schools.



School Nurse Visit



Asthma Action Plan

DATE: _____ PATIENT NAME: _____
 MOBILE: _____ PARENT/GUARDIAN NAME: _____ PHONE: _____
 ADDRESS: _____ PRIMARY CARE PHYSICIAN NAME: _____ PHONE: _____
 CITY: _____ WHAT TRIGGERED ASTHMA: _____

Respiratory Symptoms

Best Peak Flow: _____ Always use a **holding chamber/spacer** with/without a mask with your inhaler. (ask doctor)

GREEN ZONE	DOING WELL	GO!
You have NO or FEW • No waking up at night • No cough or wheeze • Can exercise easily • Sleeping all night Peak Flow is _____ (at least 80% of personal best)	Step 1: Take your controller medicine ASUSUAL . (ask doctor)	GO! (ask doctor)
YELLOW ZONE You have SOME or MANY • No waking up at night • Coughing • Wheezing • Tightness in chest • Cannot exercise easily • Waking up coughing Peak Flow is _____ (at least 60% of personal best)	GETTING WORSE Step 1: Take your GREEN ZONE medicine and ADD your rescue medicine _____ (ask doctor) Report after 20 minutes to doctor for a maximum of 2 treatments. Step 2: When I have 3 or more symptoms and/or your peak flow is in the YELLOW ZONE , take your ADD controller medicine _____ and call your health care provider today. Step 3: If you are in the YELLOW ZONE more than 3 times, or your symptoms are getting worse , know RED ZONE solutions.	CAUTION (ask doctor)
RED ZONE You have A LOT or MANY • No waking up at night • Waking up with • No exercise • Wheezing or not talking • Trouble walking or sitting • Lips or fingernails • turning blue Peak Flow is _____ (less than 50% of personal best)	EMERGENCY Step 1: Take your controller medicine NOW : (ask doctor) _____ AND Step 2: Call your health care provider NOW : (ask doctor) _____ AND Call for emergency help: OR CALL 911 immediately	GET HELP NOW! (ask doctor)

The Asthma Action Plan provides authorization for the administration of medication described in the A&P.
 This child has the knowledge and skills to self-administer quick-relief medicine at school or daycare with approval of the school nurse.
 DATE: _____ MOBILE: _____
 PARENT/GUARDIAN SIGNATURE: _____
 SCHOOL/DOCTOR SIGNATURE: _____

Parental Involvement



Authorizes:
School to follow Care Plan and
communicate with Physician

Communicates via:

- School Visits
- School Calls
- School Notes
- Provider Visits
- Provider Portal

Primary Care Physician Visit



Shared Decision Making

Weight Change

Daily Routine

Low Blood Sugar (Hypoglycemia)

Cost

Blood Sugar (A1c Reduction)

Daily Sugar Testing (Monitoring)

Side Effects

Metformin

In the first few weeks after starting Metformin, patients may have some **nausea, indigestion or diarrhea**.

Insulin

There are no other side effects associated with Insulin.

Glitazones

Over time, 10 in 100 people may have **fluid retention (edema)** while taking Glitazones. For some, it may be as little as ankle swelling. For others, fluid may build up in the lungs making it difficult to breathe. This may resolve after you stop taking the drug.

Exenatide

After starting Exenatide, some patients may have **nausea or diarrhea**. In some cases, the nausea may be severe enough that a patient has to stop taking the drug.

Sulfonylureas

Some patients get **nausea, rash** and/or **diarrhea** when they first start taking Sulfonylureas. This type of reaction may force them to stop taking the drug.

Gliptins

A few patients may get nose and sinus congestion and headaches.

Cost

These figures are estimates only and for comparison purposes only. Actual cost of product varies widely due to: 1) pharmacy, insurance plan coverage, copayments and discounts; 2) out-of-pocket costs; 3) discounts from the manufacturer or cost of generic.

Metformin (generic available)

\$0.10 per day \$0.30 / 3 months

Insulin (no generic available - (cost varies by brand)

Brand: Unit per 100 units: \$100

Form: per 100 units: \$4.0

Form: per 100 units: \$4.0

Form: per 100 units: \$4.0

Short acting analog insulin: Unit per 100 units: \$100

Form: per 100 units: \$4.0

Glitazones (No generic available)

\$7.00 per day \$21.00 / 3 months

Exenatide (no generic available)

\$10.00 per day \$30.00 / 3 months

Sulfonylureas (generic available)

\$0.10 per day \$0.30 / 3 months

Gliptins (No generic available)

\$4.00 per day \$12.00 / 3 months

Weight Change

Metformin

None

Insulin

4 to 5 lb. gain

Glitazones

More than 2 to 6 lb. gain

Exenatide

3 to 5 lb. loss

Sulfonylureas

2 to 3 lb. gain

Gliptins

None

Create a two-way conversation that enables patients to participate in making decisions to the extent they prefer.


http://webpages.charter.net/vmontori/Wiser_Choices_Program_Aids_Site/Diabetes_Choice_files/diabetes.html

transforming healthcare through IT™

Filling in Data Gaps – Patient Centric Data PRO QOL WEB TOOL

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



 personal relationships <ul style="list-style-type: none"> • Family • Friends 	 monitoring health <ul style="list-style-type: none"> • Testing blood sugars • Checking feet 	 emotional health <ul style="list-style-type: none"> • Sad • Anxious • Other emotional concerns 	 money <ul style="list-style-type: none"> • Cost of medicine or supplies • Paying for care 	 health behaviors <ul style="list-style-type: none"> • Diet • Exercise • Sleep
 medicine <ul style="list-style-type: none"> • Taking medication • Managing side effects 	 healthcare <ul style="list-style-type: none"> • Health insurance • Emergency/Urgent care 	 work <ul style="list-style-type: none"> • Schedule • Environment • Managing your health condition at work 	 physical health <ul style="list-style-type: none"> • Pain • Fatigue • Physical difficulties 	 something else


money

Have you recently had any of the following problems or concerns? (Check all that apply)

- ☐ Problems paying your medical bills
- ☐ Problems paying for all the care you needed
- ☐ Problems paying for all the medicine that you needed
- ☐ Not maintaining health insurance coverage
- ☐ Skipped a recommended test or medicine
- ☐ Not filled a prescription for a medication
- ☐ Cut pills in half or skipped doses of medicine
- ☐ Skipped dental, vision or mental health visit because of cost
- ☐ Put off or postponed getting health care
- ☐ Something else

Please check the number that describes your feelings **over the past month** from as bad as it can be to as good as it can be

Your overall quality of life:

as bad as it can be 0 1 2 3 4 5 6 7 8 9 10 as good as it can be

Your overall physical well being:



as bad as it can be 0 1 2 3 4 5 6 7 8 9 10 as good as it can be

Your overall emotional well being:

as bad as it can be 0 1 2 3 4 5 6 7 8 9 10 as good as it can be

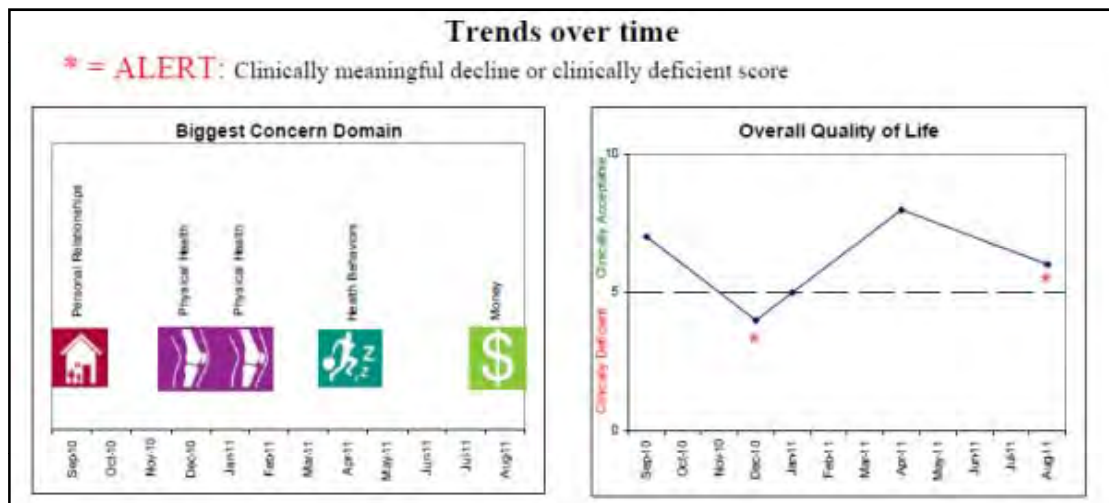
Your social interaction with other people (family, friends, or others):

as bad as it can be 0 1 2 3 4 5 6 7 8 9 10 as good as it can be

 back
  next



“It is about time we were asked about these things beyond just glucose & A1C levels.”
(Type I diabetes patient for over 30 years)





Legal Considerations

- Business Associate Agreements between
 - Between or among Beacon participants
 - Beacon consortium and data repository
- Privacy Compliance:
 - Health Insurance Portability and Accountability Act (HIPAA)
 - Family Educational Rights and Privacy Act (FERPA)
 - Public Health Agency State Data Practices Act (DPA)
- Consent & Authorization Compliance:
 - Minnesota Standard Consent Form to Release Health Information
 - Minnesota Research Authorization statute
 - Federal protection of human subject research regulations
- Regional Exemption Obtained for State Certificate of Authority:
 - Health Information Exchange, Health Data Intermediary, Record locator service

24 JD's



Thank You!

Southeast Minnesota Beacon Program

Eleven Minnesota counties working to improve health care and health delivery systems.



Home Community Engagement Schools Asthma Immunizations Diabetes Decision Aids Admit2Discharge Technology Telemedicine
Community Connections Partners News Blog

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](#) [see the Beacon videos] 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.

Contact: hart.lacey@mayo.edu

DISCLAIMER: The views and opinions expressed in this presentation are those of the author and do not necessarily represent official policy or position of HIMSS.

Search

Recent Posts

■ [Beacon is beginning](#)

Archives

Select Month ▼

Categories

Select Category ▼

Project Team Wiki

■ [Project Team Wiki](#)

transforming healthcare through IT™