



Cross-Sector Information Exchange In Humboldt County

Humboldt County – Rural Northern California



Four times the area of Rhode Island, Humboldt has about a tenth the population. With 110 miles of coastline, most residents live in three small towns close together in the center of the county. It is about a 4 hour drive to any other population center in California so residents generally receive their care from the county's four hospitals.

The economic base for the county has been lumber and fisheries, both in decline and while tourism (and Cannabis cultivation) provides jobs and income, the county has a high poverty rate, and deaths from opioids and other drugs are twice California's overall rate.

Out of 58 California Counties, Humboldt is (lower is better):

- 43 in Health Outcomes
- 21 in Quality of Life
- 39 in Health Behaviors
- 20 in Clinical Care



NCHIIN - Overlapping Themes

Community Collaboration to Improve Health

- ACH – Substance Use Disorder
- School Based Health Center
- Perinatal SUD – A Community System

Health Information Exchange

- Medical Data Providers to Medical Data Users, State Registries, more

Cross Sector Information Exchange and Care Coordination

- HIE Integrated Care Coordination Platform (ACT.md), multiple organizations, programs
- County Mental Health data (MH patient Summaries) to Facilities

NCHIIIN North Coast Health Improvement and Information Network



NCHIIIN's mission is to improve the health of the people of Humboldt County with health information exchange and support for community health improvement.

Data Providers:
Almost all facilities and labs in Humboldt

Data Recipients:
Most local practices, state registries, PHC

28, 000+ Results delivered monthly

Repository contains both medical and social care data

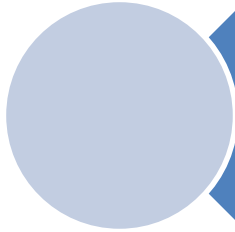
ACT.md

Perinatal Substance Use Disorder project

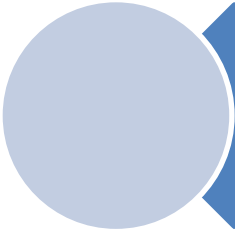
ACH: Humboldt Community Health Trust

Cross-Sector Data Exchange

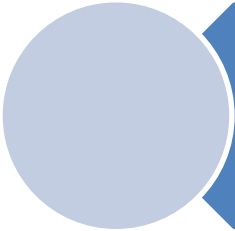
Background to Cross Sector Exchange



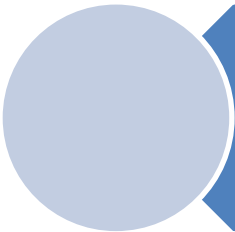
Intentional effort to build relationships between medical care and human services organizations and leaders



Growing interest in cross-sector data exchange for whole person care - medical, behavioral, socioeconomic, and other data

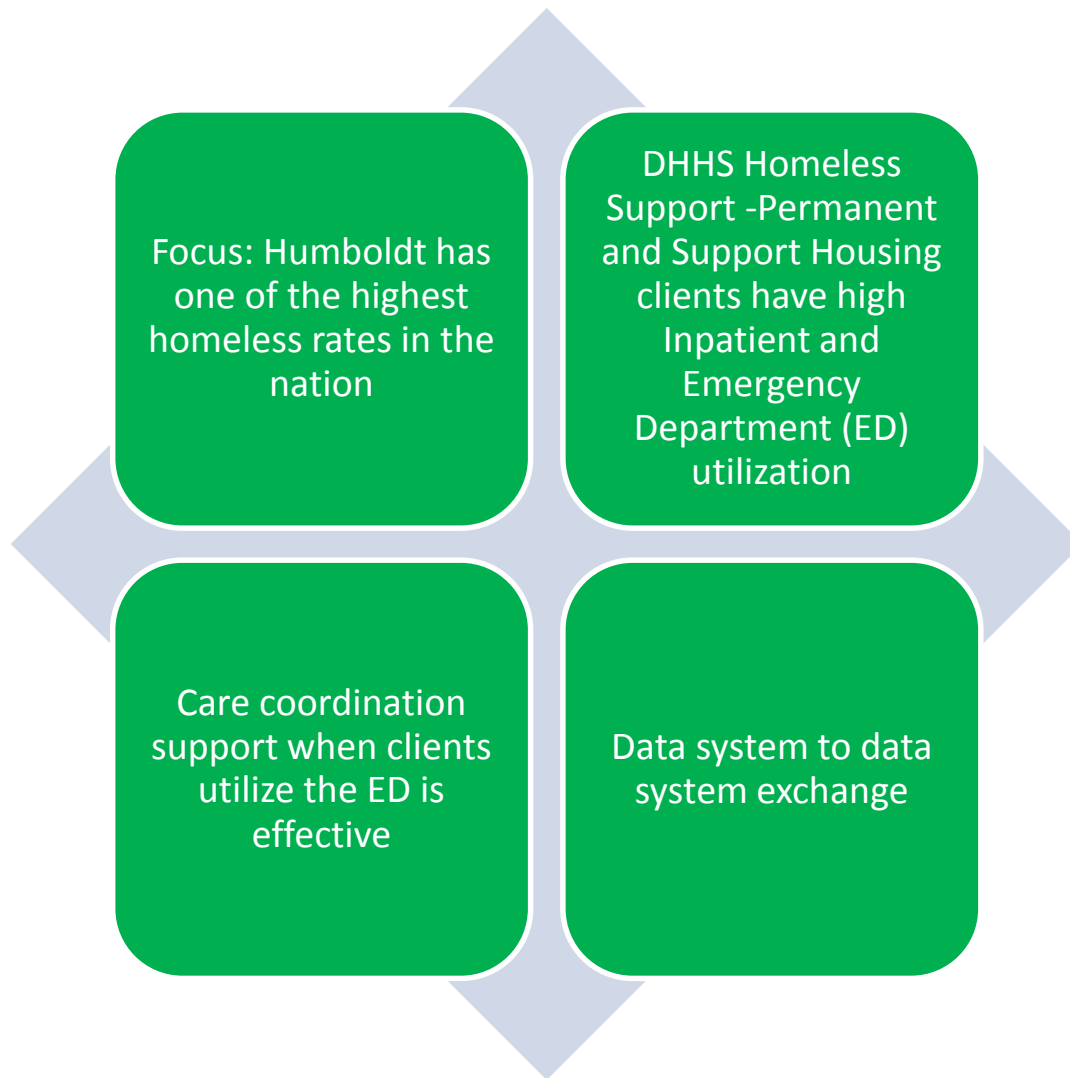


AcademyHealth Peer Learning Community grant opportunity (Office of the National Coordinator for Health Information Technology)

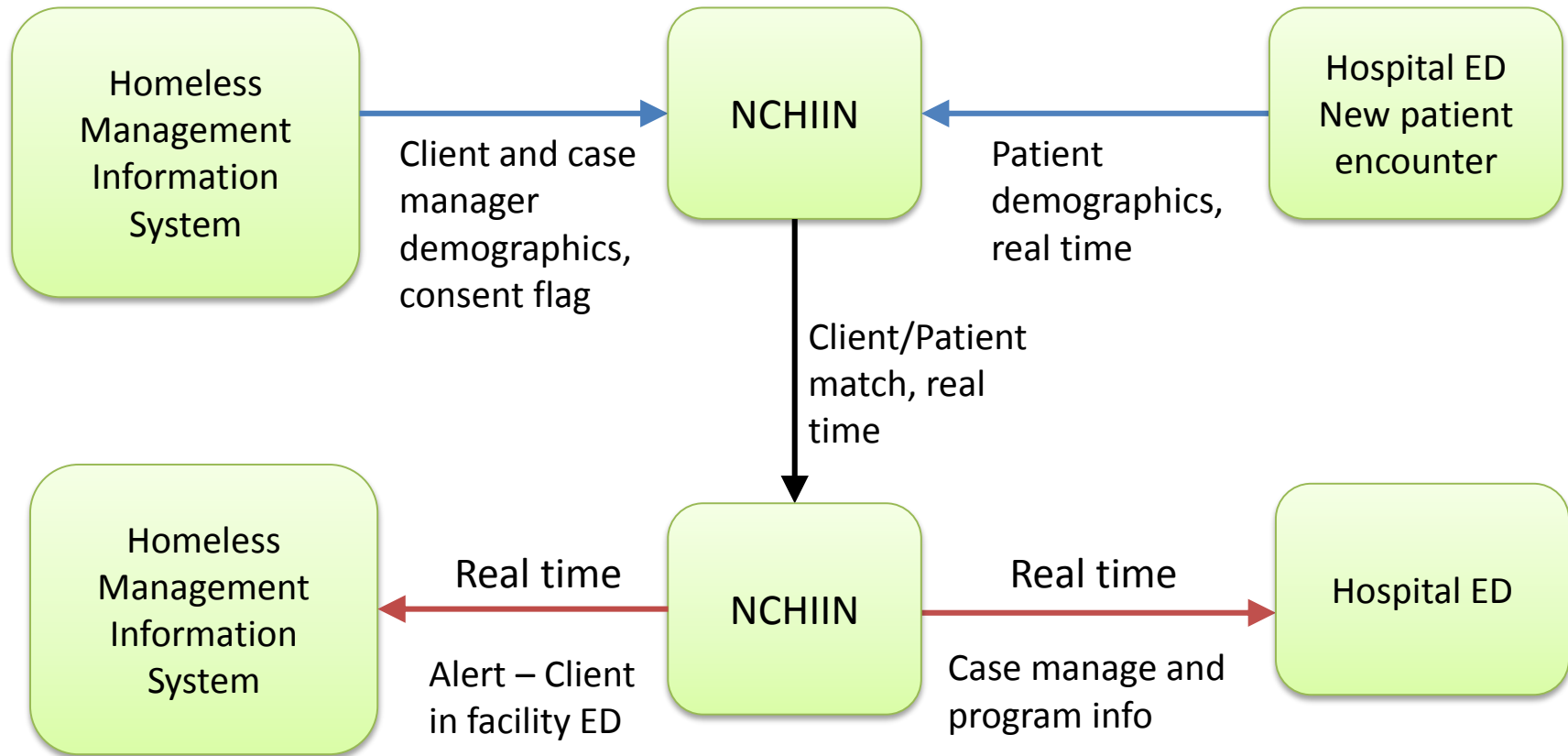


Meet with County of Humboldt DHHS to look for cross sector project to leverage exchange capacity, skills, and address client/patient needs

Plan Drivers



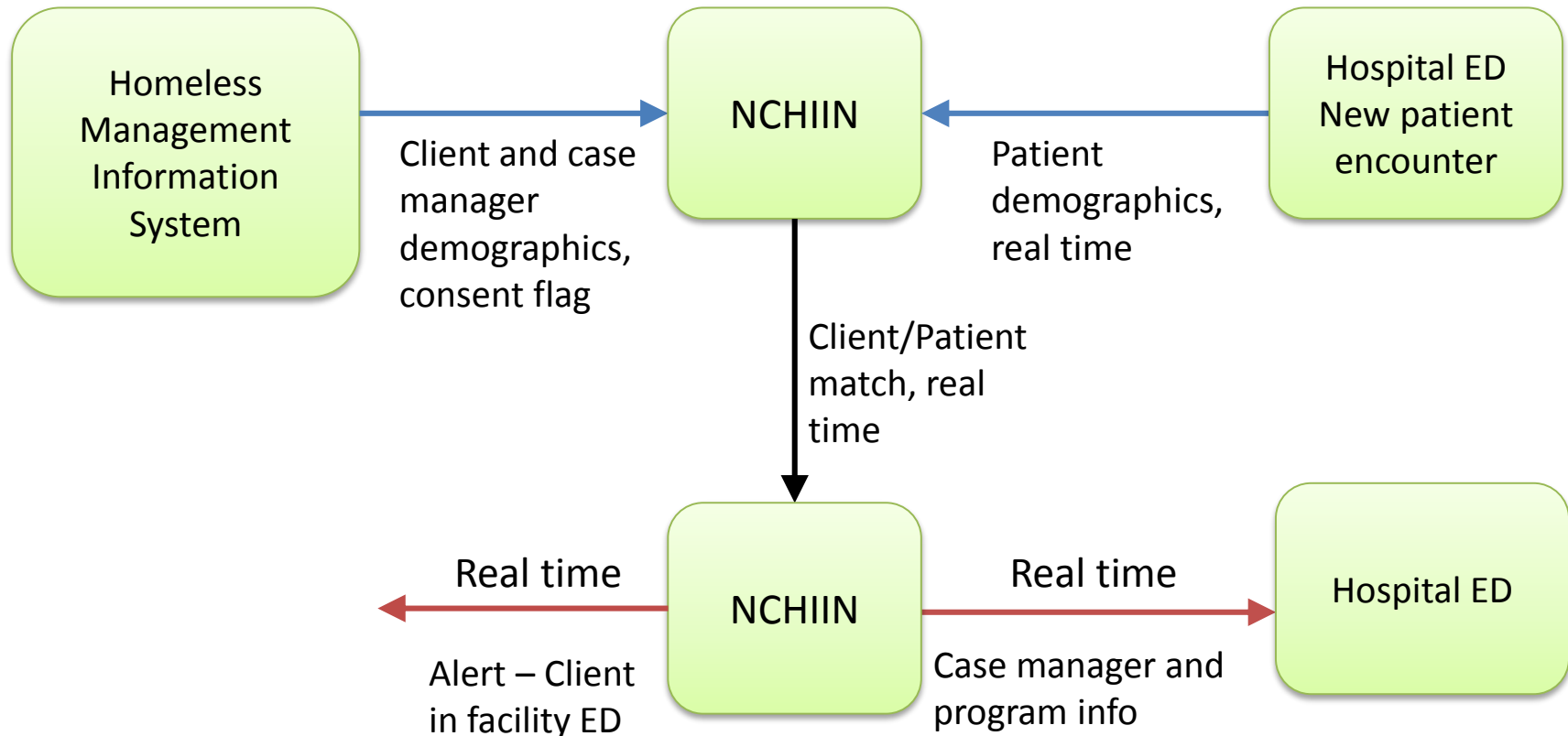
Project Use Case



GOAL

Provide client case manager with information to allow them to follow client use of Emergency Department Services, work toward reducing inappropriate use

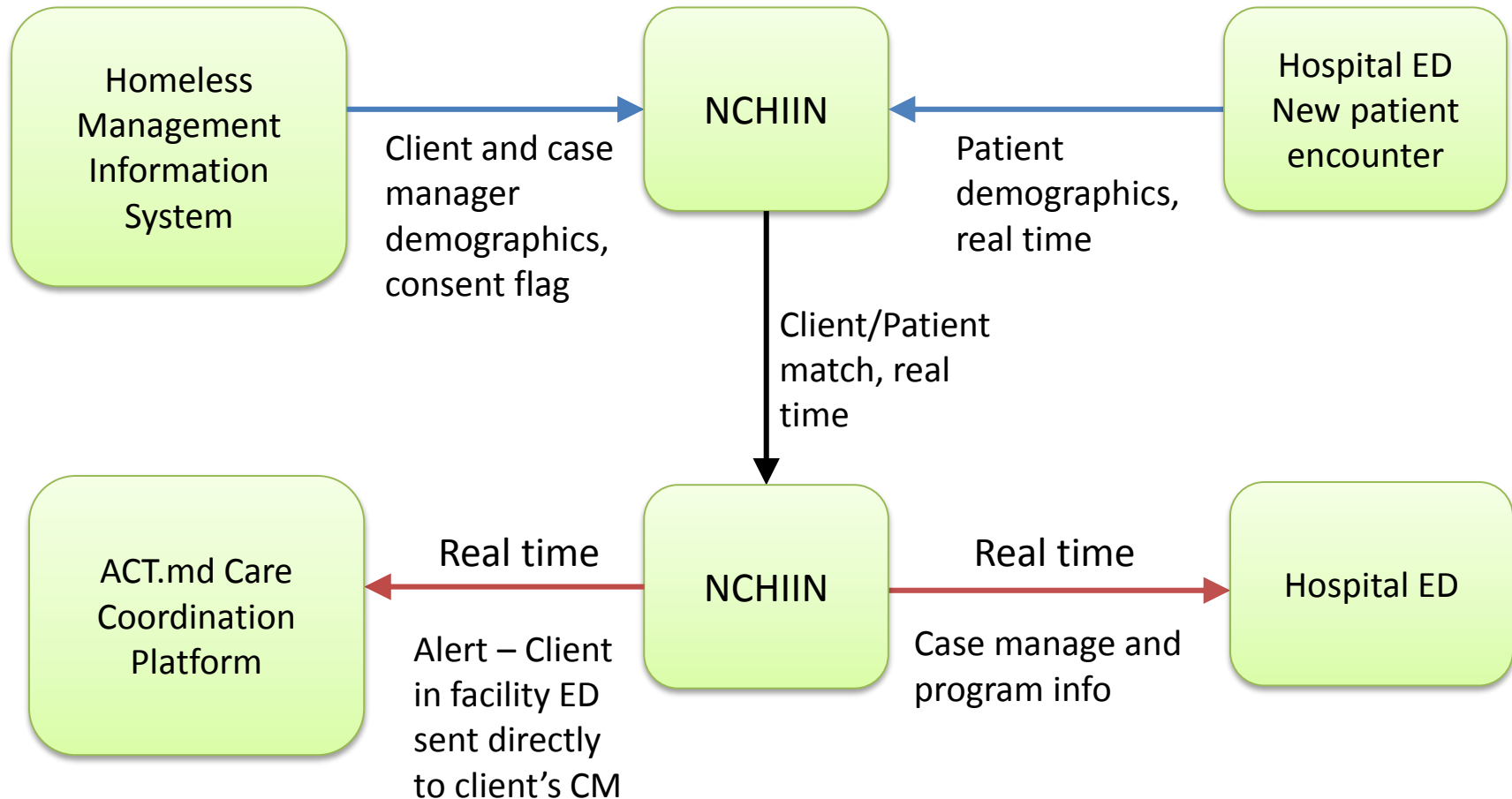
Project Use Case



GOAL

Provide client case manager with information to allow them to follow client use of Emergency Department Services, work toward reducing inappropriate use

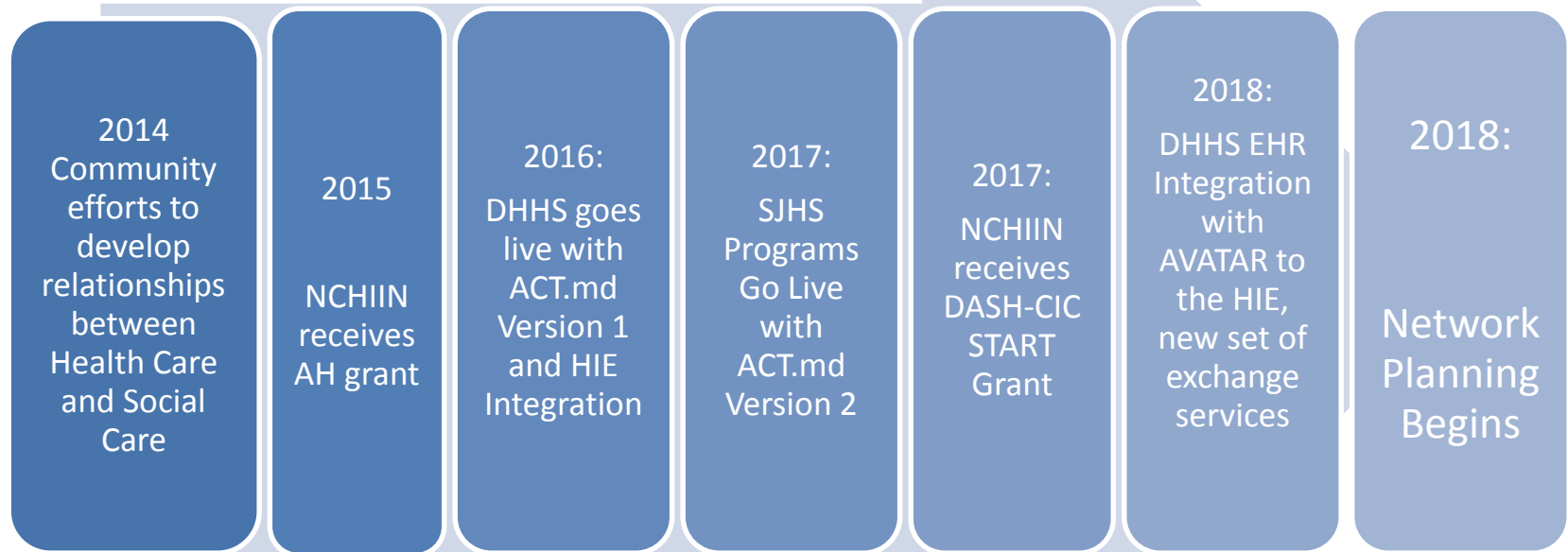
Project Use Case



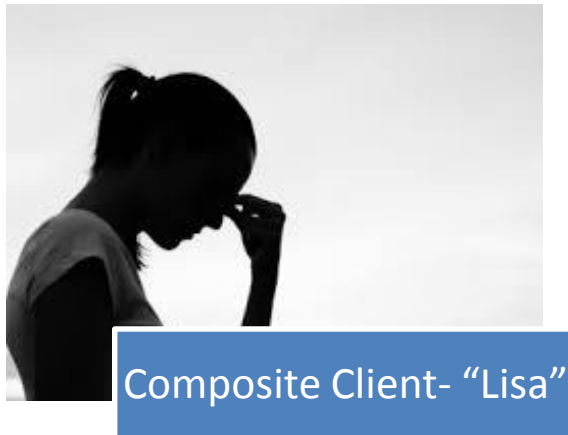
GOAL

Provide client case manager with information to allow them to follow client use of Emergency Department Services, work toward reducing inappropriate use

The Road to Data Across Sectors



Background on Housing Program



ACT.md Demo

Demo Site

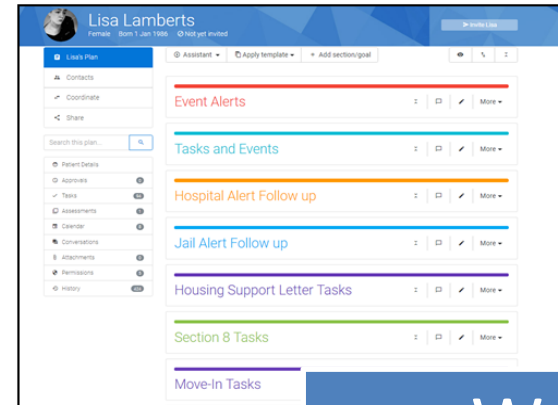
- No PHI

Composite Client

- “Lisa Lamberts”

Overview:

- Tasks
- Events
- Conversations
- Document Management
- Workflows
- HIE Integration



Web




Mobile










Team Based Approach to Care





Lisa Lamberts
Female Born 1 Jan 1986 Not yet invited

➤ Invite Lisa












Search this plan... 






-  Patient Details
-  Approvals 0
-  Tasks 95
-  Assessments 1
-  Calendar 7
-  Conversations
-  Attachments 4
-  Permissions 5
-  History 455

Tasks and Events

   More ▾

Use this section to track tasks and events associated with client's needs.

- | | | | |
|---|-------------------------------|--|---|
|  | 05 Oct 2017 7:00 PM – 7:30 PM | CalFresh Enrollment Appointment at Food Bank |  |
| | |  2 attendees | |
|  | 19 Oct 2018 6:00 PM – 6:30 PM | DMV appointment to get ID |  |
| | |  Location  2 attendees | |
|  | 25 Oct 2018 7:00 PM – 7:30 PM | Housing Interview |  |
| | |  Location  2 attendees | |

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/>  | ★ Connect Lisa to EDD | <div>Jessica Osbor...</div> <div>04 Oct</div> |
| <input checked="" type="checkbox"/>  | ☆ Help Lisa secure a mobile phone. | <div>Kerri Escudero</div> <div>Yesterday</div> |
| <input checked="" type="checkbox"/>  | ☆ Take Lisa to the food bank | <div>Kerri Escudero</div> <div>Today</div> |
| <input checked="" type="checkbox"/>  | ☆ Monday Check in | <div>2</div> <div>Unassigned</div> <div>Scheduled</div> |
| <input checked="" type="checkbox"/>  | ☆ Tuesday Check in | <div>Unassigned</div> <div>Unscheduled</div> |

Team Based Approach to Care



Lisa Lamberts

Female Born 1 Jan 1986 Not yet invited

➤ Invite Lisa


« Tasks and Events

✓ Task


Edit Archive Trash

Monday Check in

New Attachment

 Jessica Osborne-Stafsnes
10/04/2018 01:54 pm

10/8/18: Lisa doing well but needed more bus vouchers. Kerri will bring some buy during her visit tomorrow.

 Jessica Osborne-Stafsnes
10/12/2018 02:35 pm

Met with Lisa today and went over some outstanding items on the move-in check list. Her apartment was clean but she's out of basic cleaning supplies.

Type message and hit Enter to send...

Type @ to mention someone by name. Type : to use an emoji. Anyone who can see this task can see these messages.

Progress
Started

Due date
Unscheduled


Assigned to
Unassigned

Labels
No labels.

Created
3 months ago by Jessica Osborne-Stafsnes



Alerts



Lisa Lamberts
Female Born 1 Jan 1986 Not yet invited


▶ Invite Lisa

Lisa's Plan

Contacts

Coordinate

Share

Search this plan... 

Patient Details

Approvals 0

✓ Tasks 94

Assessments 1

Calendar 8




Conversations

Attachments 4



Permissions 5

History 446









Assistant ▾ Apply template ▾ + Add section/goal

Event Alerts

⌵ |  |  | More ▾

This section includes event alerts on the client from the HIE integration.

	20 Apr	1:00 PM – 1:30 PM	Jail Booking Alert	 2 attendees
	24 Apr	1:00 PM – 1:30 PM	Emergency Department Admit	 Location 2 attendees
	24 Apr	5:00 PM – 3:00 AM	Emergency Department Discharge	 Location 1 attendee
	03 Oct	8:00 PM – 8:30 PM	SV admission alert	 1 attendee

✓ ▾

☆ Review Emergency Department Admit Event


Jessica Osbor...
24 Jul


✓ ▾


☆ Coordinate with Hospital Discharge Planner


Kerri Escudero
Last Friday

✓ New task

 Add an assessment

 New event

 New attachment

 Apply template


Standardization of Workflow

The screenshot displays a user profile for Lisa Lamberts (Female, Born 1 Jan 1986, Not yet invited) with an 'Invite Lisa' button. The interface is organized into a sidebar on the left and a main content area on the right. The sidebar includes a 'Lisa's Plan' section with options for Contacts, Coordinate, and Share, followed by a search bar and a list of plan components: Patient Details, Approvals (0), Tasks (94), Assessments (1), Calendar (8), Conversations, Attachments (4), Permissions (5), and History (440). The main content area features a top bar with 'Assistant', 'Apply template', and 'Add section/goal' options. Below this, three colored horizontal bars categorize the tasks: 'Event Alerts' (red), 'Tasks and Events' (blue), and 'Hospital Alert Follow-up' (orange). The 'Hospital Alert Follow-up' section contains four tasks, each with a status dropdown (Unassigned/Unscheduled) and a description:

- ★ **If possible, contact client at emergency room/hospital**
Connect with charge nurse/discharge planner/social worker. Discuss discharge plan. Advocate for...
- ★ **Identify additional supports and add individuals to the client's ACT.md care team as appropriate**
Talk to the client about social support systems (friend, family member, neighbor, etc.) and add L...
- ★ **Explain to the client how to access same-day and after hour appointments**
Explain to client how to contact and advocate for themselves at Primary Care. Encourage the m to...
- ★ **With the client, identify issues that could be addressed to avoid emergency room visits in the future**
Note what kept client from seeking care early on, prior to escalating to an emergency departm ent...

At the bottom, a bar provides quick actions: 'New task', 'Add an assessment', 'New event', 'New attachment', and 'Apply template'.

Standardization of Workflow



Lisa Lamberts
Female Born 1 Jan 1986 Not yet invited


> Invite Lisa

Move-In Tasks

⌵ | 🗨 | ✎ | More ▾

<input checked="" type="checkbox"/>	☆ Assist client to complete Home Inspection Form and upload to ACT.md files section	Kerri Escudero 27 Sep
<input type="checkbox"/>	☆ Take photos of home and upload to ACT.md files section	Jessica Osbor... Tomorrow
<input checked="" type="checkbox"/>	☆ Assist client to complete "What Does my Lease Say" worksheet	Kerri Escudero Unscheduled
<input type="checkbox"/>	☆ Assist client to obtain a spare house/mailbox key	Unassigned Unscheduled
<input type="checkbox"/>	☆ Assist client to complete Practice Budget worksheet	Unassigned Unscheduled
<input type="checkbox"/>	☆ Assist client with Food Bank appointments	Unassigned Unscheduled
<input type="checkbox"/>	☆ Assist client in change of address for SSI and no longer qualifies for non-cooking facility stipend	Unassigned Unscheduled
<input type="checkbox"/>	☆ Ensure Section 8 Section (with ROI) is complete Please rename the file with the following convention: LastNameFirstInitial-Section8Application-M...	Unassigned Unscheduled
<input type="checkbox"/>	☆ Assist client to turn on PG&E	Unassigned Unscheduled
<input type="checkbox"/>	☆ Assist client to apply for HEAP	Unassigned Unscheduled
<input type="checkbox"/>	☆ Assist client to apply for IHSS	Unassigned Unscheduled
<input type="checkbox"/>	☆ Assist client to complete Good Neighbor Policy worksheet	Unassigned Unscheduled

Coordination and MDT Approach



Lisa Lamberts

Female Born 1 Jan 1986 Not yet invited

Contacts

Coordinate

Share

Search this plan...

🔍

Patient Details

Approvals 0

Tasks 94

Assessments 1

Calendar 8

Conversations

Attachments 4

Permissions 5

History 448

Note

B I U

☰ ☰ ☰

🔗

H1 H2

↶ ↷

Date of outreach

Now

Time of outreach

Save

Related activities

☐ Phone call

☐ Visit

☐ E-mail

☐ Letter

☐ Meeting

☐ Unable To Reach

Minutes spent...

minutes

Outreach history

📅

Visit with client went well today. Client has an ophthalmology appointment next week and requested assistance with transportation. Kerri will provide transportation assistance.

Visit

04 Oct 12:00 PM by Jessica Osborne-Stafsnes

📅

Kerri visited with client on Monday and noted that the house was very messy and client had no food in the refrigerator. Client shared that her IHSS worker has stopped showing up. I will request that Tom completes the IHSS forms to request a new caregiver.

Visit

01 Oct 8:00 AM by Jessica Osborne-Stafsnes

📅

Stopped by Lisa's to see if she wanted to participate in the bowling field trip and saw that she needed dog food. we went to the store today and purchased enough for about a week.

Visit

20 Sep 8:09 AM by Jessica Osborne-Stafsnes

📅

called lisa to try to schedule a time to take her to SSI appt; she was just waking up and said she would get back to me later today

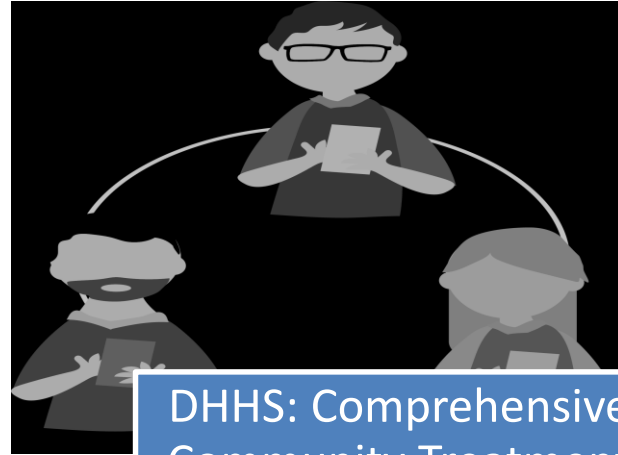
Phone call

18 Sep 9:00 AM by Jessica Osborne-Stafsnes

ACT.md: Current Humboldt Use Cases



DHHS: Housing and
Street Outreach



DHHS: Comprehensive
Community Treatment



SJHS: Care Transitions



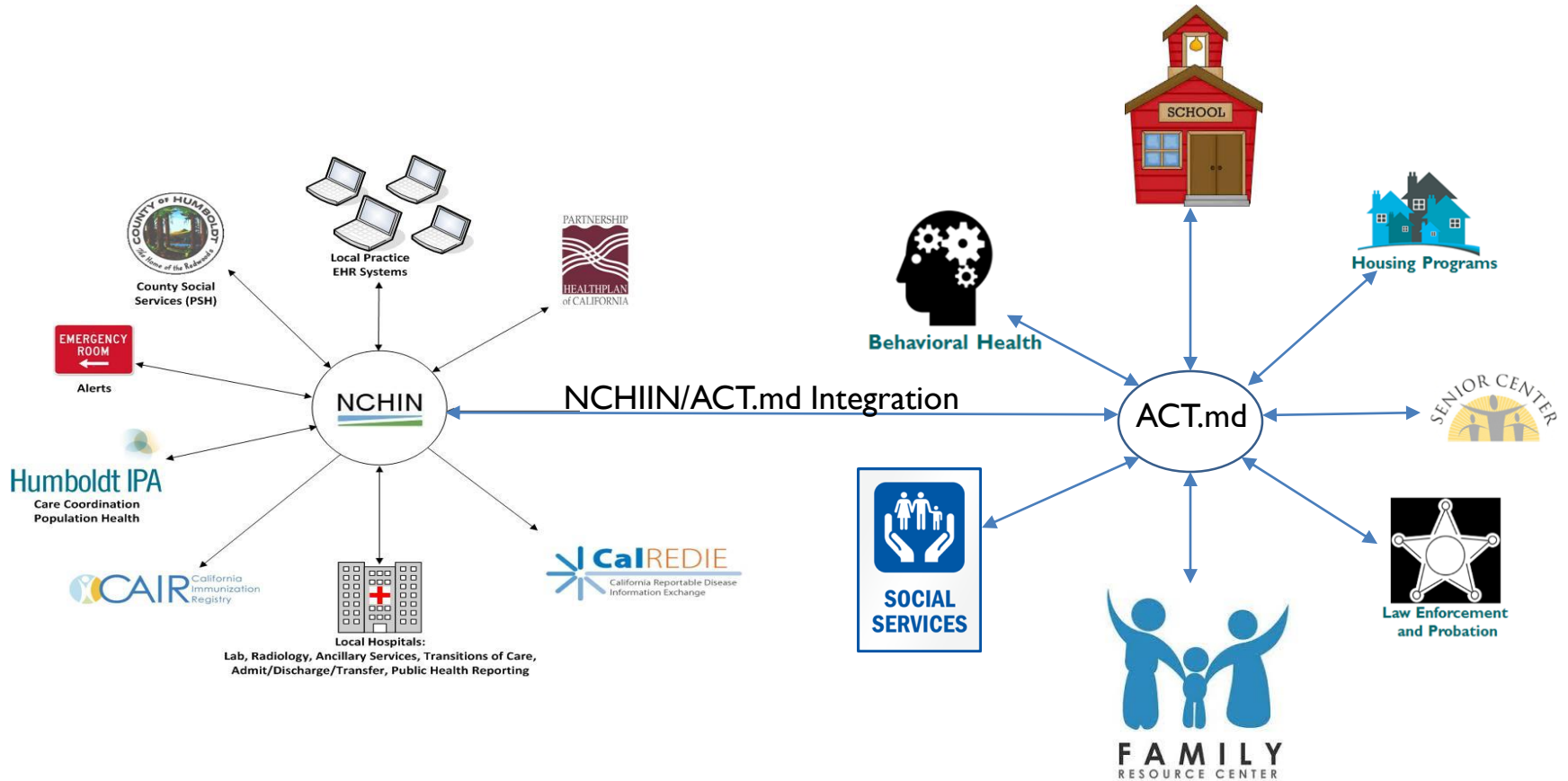
SJHS: Paso A Paso

From the Field....

“Who’s coordinating the care coordinators? It takes a lot of time and discovery to understand what other care coordinators are involved in our client’s care and who’s doing what.”



Coordinating Care Coordination



DASH CIC-START

New DHHS projects

- Integration with DHHS EHR, Avatar
 - Additional data for ACT.md (replace HMIS in time)
 - Data for patient summaries for hospitals
- Add new programs to ACT.md platform: CCT
- Alerts to case managers (platform) when clients admitted to Crisis Stabilization Unit/Sempervirens (SV) Psychiatric Health Facility
- Physical Health summary for admits to CSU, SV

Integration Infrastructure

- Formats for regulatory review
- Develop a method of onboarding new programs and organizations to the platform
- Investigate agreements for participation between HIE's and non medical NGOs

Mental Health Information for a Professional Providing Medical or Psychological Treatment - Hospital



Mental Health Patient Summary

Demographics

Name: Doe, John S.
DOB: 01/31/1970

Crisis Stabilization Unit Visits last 90 days

Date	Location	Attending Provider
12/12/15	CSU	Love, M.
11/23/15	CSU	Love, M.
11/10/15	CSU	Muller, C.
10/14/15	CSU	Love, M.

SV discharges (inpatient) last 90 days

D/C Date	Location	Attending Provider
11/11/15	SV	Torres, O.

DHHS MH Contact Information

Location	Phone Number
CSU Nurses Charge Station	707-599-2984
SV Nurses Charge Station	707-445-7710
Adult Outpatient Services	707-268-2900
Children and Family Services	707-268-2800

Current MH Dx

Date	Diagnosis
05/30/2018	Bipolar Disorder, current episode manic sever with psychotic features
5/14/2018	Bipolar disorder, in partial remission most recent episode manic
5/10/2018	Major depressive disorder, single Episode, unspecified

Current Med List from County MH

Date of Last Med Rec: 5/30/2018

Medication	Dose
Flomax	0.4mg daily
Norvasc	10mg daily
Synthroid	75mcg daily
Invega Sustaina	156 mg IM Q 4 weeks
Topiramate	50 mg tablet 1 1/2 at bedtime

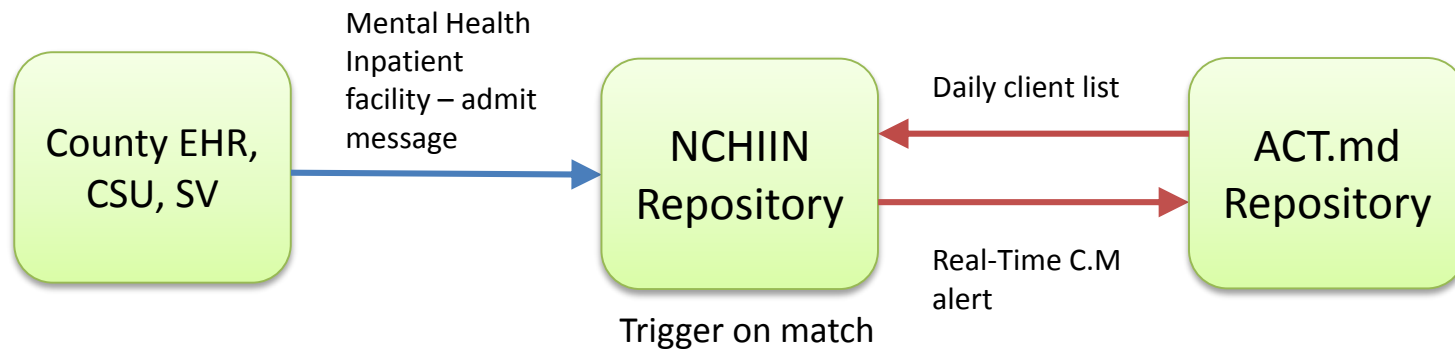
HIE Integration

Alerts and Notifications are notices of events or additions to the care team. Depending on the organization or the team, they are directed to a specific CM, a team, administrative support, or a facility

- Facility ED and inpatient registrations, admissions – real time
- Registration and admission to County Crisis Stabilization Unit, or Inpatient Mental Health - real time
- Incarceration/release, County Jail - daily
- Probation Officer contact Information – daily
- Case manager, program, contact information for hospital facilities
- FQHC appointments, (in design)

CARE COORDINATION USE CASE

TRANSITION AND COORDINATION OF CARE FOR ACUTE MENTAL HEALTH



GOAL

Support day-to-day case management of mental health patients and improve coordination of care across the care team.

CARE COORDINATION USE CASE

TRANSITION AND COORDINATION OF CARE FOR ACUTE MENTAL HEALTH

Use Case	Coordination of Care for Acute Mental Health Patients
Goal	Support day-to-day case management of mental health patients and improve coordination of care across the care team
Trading Partners & Systems	<ul style="list-style-type: none"> County Behavioral Health, using electronic health record (EHR) NCHIIN, using HIE repository to validate client in ACT.md, route alerts, and update client plan County Case Manager, using ACT.md to review alerts and view client plan
Data to Exchange	<ul style="list-style-type: none"> Admit/discharge information and client demographics from County EHR (Avatar) Client demographic data from NCHIIN repository to ACT.md and Transition of care status alert to ACT.md
Story	County case managers identify a need to be alerted when a mental health client is admitted or discharged from an acute inpatient facility or crisis stabilization unit. An alert (ADT message) is sent from the County's EHR system upon this transition of care to the NCHIIN repository. NCHIIN performs a daily match against the ACT.md platform client list. When a valid match is made upon receipt of the alert, NCHIIN will update the client plan in ACT.md with the transition of care information and will send an automatic alert to the case manager. This real-time notification of a client's health status
Programs	County Behavioral Health
Privacy Considerations	<p>Consent from the client is required to share information, with the following exceptions:</p> <ul style="list-style-type: none"> The case manager receiving the information and the mental health provider disclosing the information are providing services within the same organization; or The information being shared is for treatment or payment purposes. <p>With a valid authorization, protected information may be shared for care coordination including social services and community benefit organizations.</p>
Applicable Authority	<p>Health Information Portability and Accountability Act (HIPAA) 45 C.F.R. § 164.506</p> <p>Confidentiality of Medical Information Act (CMIA) CA Civil Code § 56.10</p> <p>Lanterman Petris Short Act (LPS) CA Welfare & Institutions Code § 5328(a)</p>

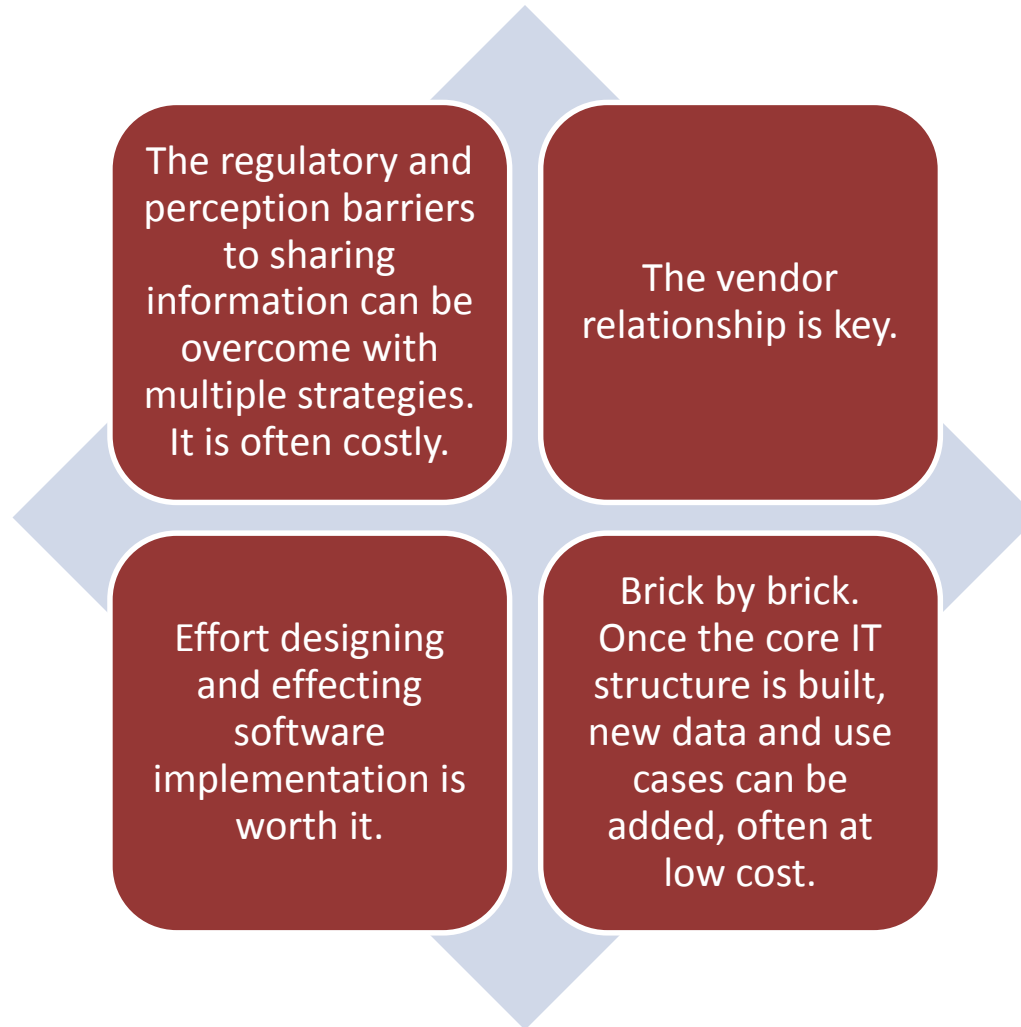
General Principles



Human Services



HIE Integrated Platform



Support and Partners

- AcademyHealth – Peer Learning Community supported by The Office of the National Coordinator
- Data Across Sectors for Health (DASH) CIC-START supported by Robert Wood Johnson Foundation
- County of Humboldt Department of Health and Human Services
- Accountable Care Transactions
- Partnership HealthPlan of California
- Humboldt Independent Practice Association
- Humboldt Homeless Housing Coalition
- St. Joseph Hospital, Humboldt County
- Mad River Community Hospital
- Intrepid Ascent

Our Thanks.



“Data moves at the
speed of trust.”

--David Ross, ScD

Public Health

Informatics Institute

Contact: Martin Love- mlove@nchiin.org