



*Serving Sonoma, Napa, Marin & Yolo Counties*

.

## Track 2: Engaging in Health Information Exchange for Care Transitions

### Additional Activities:

**10:45 AM – 1:30 PM**

- \*Help Squad – one-on-one PCMH and Meaningful Use Support (Innovation Room)
- \*Promising Practices Gallery Walk Raffle (Inside perimeter of the office)

**1:00 PM**

- \*Promising Practices Raffle (Training Room)  
*See the back of your agenda to participate*

# Leveraging Health Information Exchange for Care Transitions

Symposium on the Future of Complex Care

**Humboldt Independent Practice Association**

Jessica Osborne-Stafsnes, MSHS  
Kim Perris, MSN, RN, CNL

# Humboldt County, CA

136,646 people

- ~40% Medicaid Lives
- ~40 % Commercial Lives
- ~15% Medicare Lives
- ~5 % Uninsured

3 Hospital Systems

Rapidly consolidating practice environment

Community Health Issues: Substance Use Disorder (SUD),  
Mental Health Access, Adverse Childhood Experiences (ACES)

# Context - Two Organizations

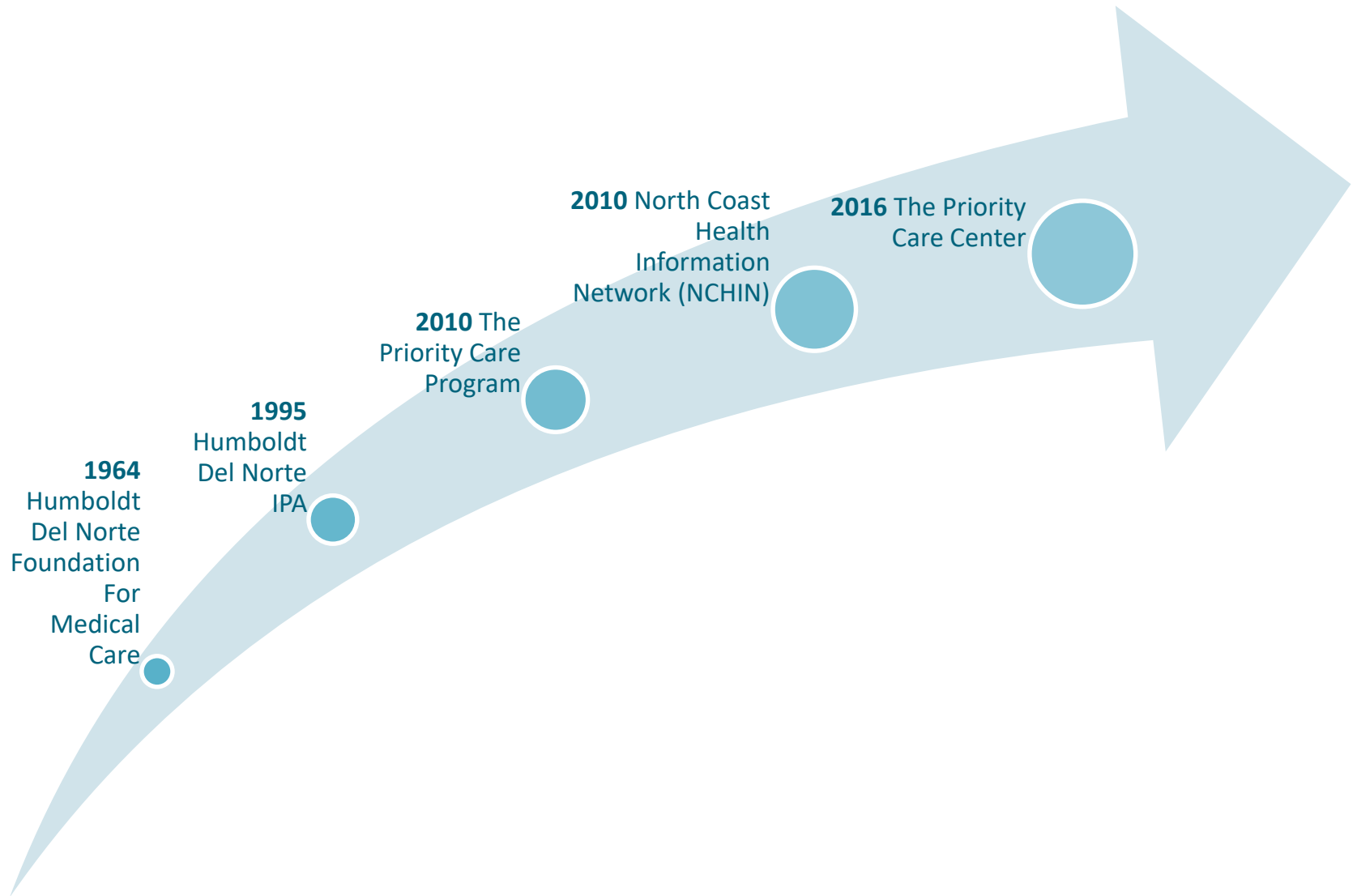
## **Humboldt Independent Practice Association**

- **Managed Care Contracting**
- **Third Party Administrative Services**
- **Accountable Care Organization**
- **Care coordination**
- **Primary Care**
- ❖ **Physician Board**

## **North Coast Health Improvement and Information Network**

- **Health Information Exchange**
- **Community Health Improvement**
- ❖ **Community Board**

# History of Humboldt IPA



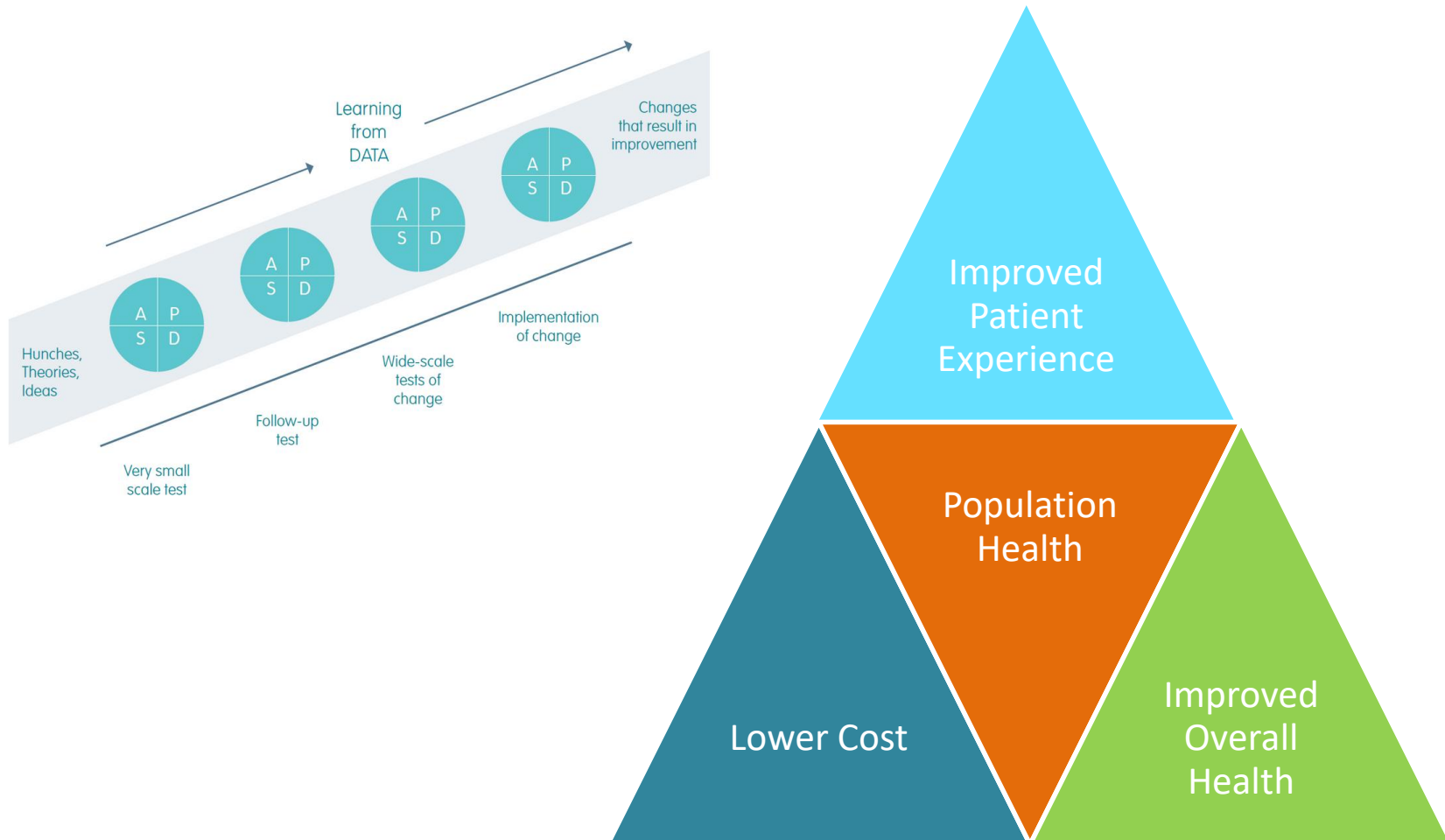


# Peeling Back the Layers



# Core Values

## Triple Aim



# North Coast Health Improvement and Information Network (NCHIIN)

- Non-Profit Community Health Information Exchange
- Initiated in 2010 out of a data sharing and interoperability collaborative
- 2016: NCHIN to NCHIIN
  - Updated name reflect the organization's community care improvement initiatives





# ADT for Care Coordination

- What is ADT?
  - Admission, Discharge, Transfer messages
- ADT as a tool for care coordination:
  - Real-time data
  - Prevent duplication of hospital/imaging services
  - Bridge care to services/appropriate Care
  - Identify high risk patients/patients with high needs

# ADT: 2 Use Cases for Care Coordination



## Alerts for Social Care

- Hospital (Emergency and In-Patient) Alerts
- Jail Alerts



## Alerts for Primary Care

- IPA-Utilization Management
- PCC-Nurse Practitioner transitionalist, RN care coordinator

# Premise: Alerts for Social Care



Clients have high  
emergency dept. use



Multiple case  
managers involved

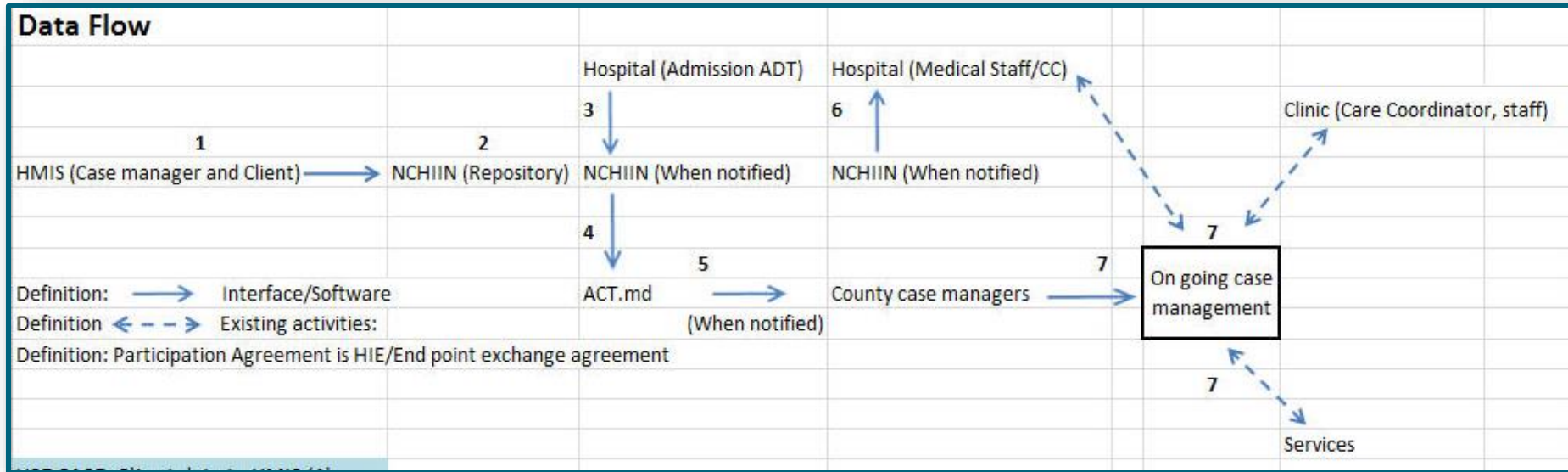


Lack of information  
sharing infrastructure

## Hypothesis:

Data linkages  
between NCHIIN's  
healthcare  
participants and  
Department of  
Health and Human  
Services (DHHS) can  
improve care for  
individual clients and  
reduce burden on  
impacted systems

# Alerts for Social Care: Data Flow



## Data Elements:

- Client Name and Basic Demographics
  - Housing Program Enrollment
    - Case Manager Name
- Hospital Event Notification (ADT)
  - PROMIS



## NCHIIN Support Client

Female Born 1 Jan 1940 Age 77

[Add a tag](#)

NCHIIN Support has not been invited to join ACT.md yet.

[Invite now](#) · [Archive record](#)

[To Do](#) <sup>1</sup> [Care Plan](#) [Patient](#) [Team](#) <sup>45</sup> [Calendar](#) [Files](#) [History](#) [Updates](#)

[Assign tasks...](#) [Copy summary to clipboard](#) [New discussion...](#) [Send secure message...](#)

[All acts](#)

[New task...](#)

[Jessica Ockame-Stafnes](#)

[Due date](#)

[Save](#)

[Finish](#)

Jessica Fox  
Case Manager



**Alert: Emergency Department Admit on Saturday, April 29, 2017 at 12:09:00AM**

**Due 8 May**

[Finish](#)

Assigned to  
**You**

Follow up with client after emergency room visit

**Due 4 Jun**

[Finish](#)

Jennifer Oliphant  
Social Worker

Add appropriate individuals to the client's ACT.md care team

**Due 4 Jun**

[Finish](#)

Jennifer Oliphant  
Social Worker

With the client, identify a person that the client can call to assist with the navigation of care

**Due 4 Jun**

[Finish](#)

Jennifer Oliphant  
Social Worker

Explain to the client how to access same-day and after hour appointments

**Due 4 Jun**

[Finish](#)

Betty Garfield  
Peer Coach II

With the client, identify issues that could be addressed to avoid emergency room visits in the future

**Due 4 Jun**

[Finish](#)

Betty Garfield  
Peer Coach II

With the client, develop a plan to address the issues identified

**Due 9 Jun**

[Finish](#)

Assigned to  
**You**

Take Client to DMV

**Due 23 Jun**

[Finish](#)

Assigned to  
**You**

Sign-Up Client for CalFresh

**Due 30 Jun**



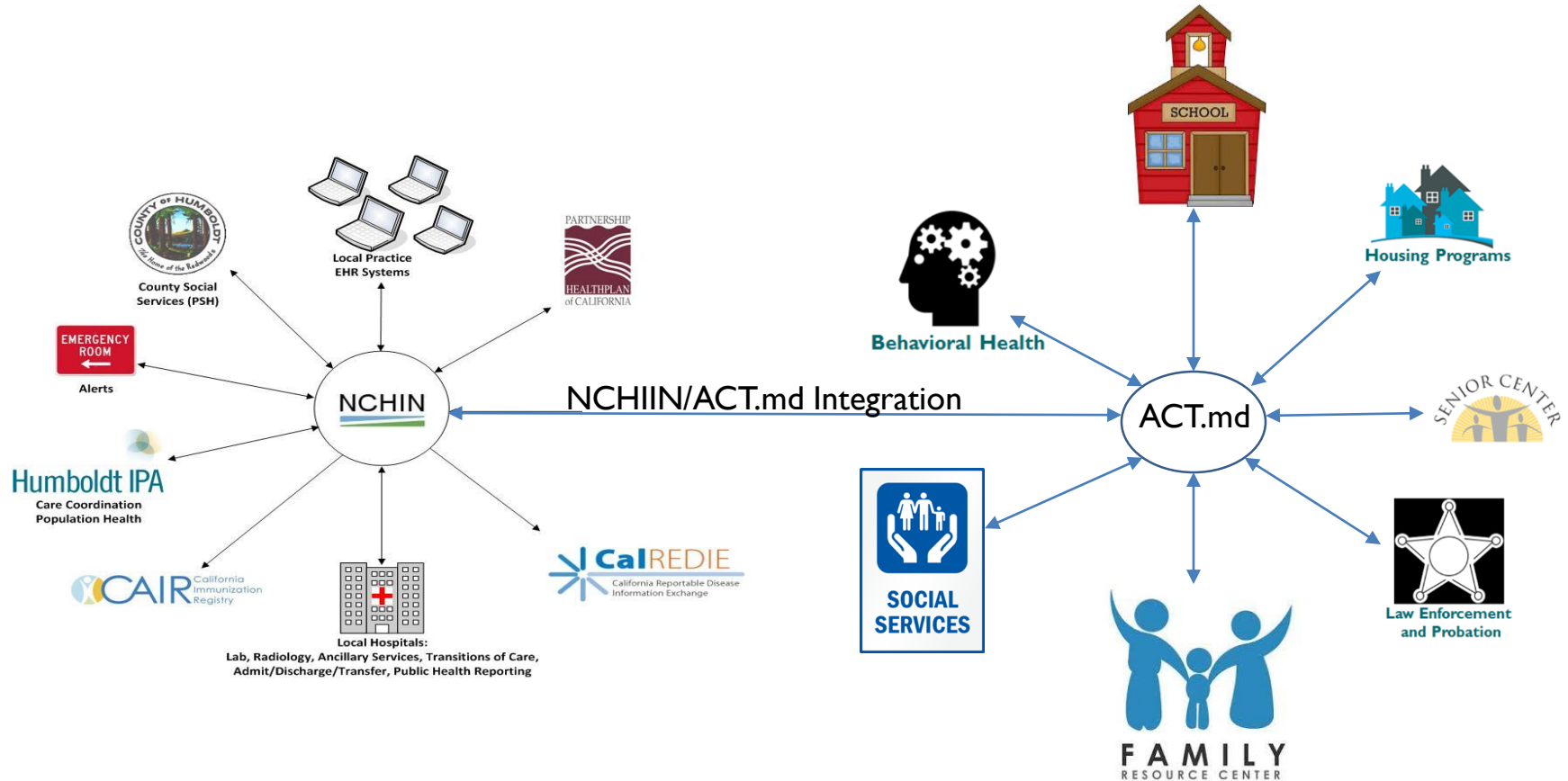
## ED Report Patient Summary

**DISCLAIMER:** This summary report contains data held in the NCHIN repository. It may not represent all healthcare information about the patient. Only a subset of available lab results is reported.

REFERENCE ONLY—Not part of the permanent record.

Demographics			Care Managers Involved with Pt														
Name: Doe, John S. DOB: 01/31/1970 1234 Main Street, Eureka, CA 95501 PHONE (H): 707-555-1212 Distinct addresses seen in last year: 4321 Street Avenue, Arcata, CA 95521 PO Box 987, Fortuna, CA 95540			Name		Contact #		Program										
			Jane Doe		707-555-2121		PSH										
			Jenifer King		707-443-4563		Priority Care										
			John Manager		707-555-9876		Open Door										
Special Alerts			X ray last 90 days														
9 ER Visits in the last year 2 Inpatient Admissions in the last year Permanent Supportive Housing Client MEDICAL ONCOLOGY PATIENT RADIATION ONCOLOGY PATIENT			Date		Location		Procedure										
			11/23/15		MRCH		Chest 2 views										
			Allergies (hospital)														
			Allergy		Severity		Reaction										
			Penicillins		MO		UNKNOWN										
			Lisinopril		MO		SWELLING										
ER Visits last 90 days			Providers seen in last 180 days														
Date		Location		Chief Complaint		Provider		Most Recent Date									
12/12/15		SJHS		Abdominal Pain		Abbassi, Shahram		03/09									
11/23/15		MRCH		SOB		Korenstein, Steven		05/23									
11/10/15		SJHS		Chest Pain													
10/14/15		SJHS		"Feels lousy"													
Inpatient last 90 days			Labs within last 90 days														
D/C Date		Location		Diagnoses		Name		Results		Ref Range		Flag		Obs Date		Sndr	
11/11/15		SJHS		Chest Pain Arrythmia		WBC		6.00 K/Cmm		3.5-10.0 K/Cmm		Normal		6/29		SJ	
						Hemoglobin		15.9 g/dL		13.5-16.5 g/dL		Normal		6/29		SJ	
						BUN		28 mg/dL		7-18 mg/dL		High		6/29		SJ	
						Platelet		119 K/Cmm		140-340 K/Cmm		Low		6/29		SJ	
						Glucose		95 mg/dL		74-106 mg/dL		Normal		6/29		SJ	
						Creatinine		1.96 mg/dL		0.7-1.3 mg/dL		Normal		6/29		SJ	
						ALT		30 U/L		16-61 U/L		Normal		6/29		SJ	
						...											
MRI last 365 days																	
Date		Location		Procedure													
11/23/15		MRCH		C Spine													
CT last 90 days																	
Date		Location		Procedure													
11/23/15		MRCH		CT Lumbar Spine wo contrast													

# Future State: Alerts for Social Care



# Using ADT in Primary Care

- Background on Priority Care Center
- Current/Future State
- Team-based care practice model
- 10 building blocks as a framework

# The Priority Care Program Background

- Intensive Care Coordination
- Transitionalist
- Wellness Coaching
- Diabetes Education Program
- Mental Health
- Shared Decision Making
- Population Health

# Priority Care Center

## Vision

For all people served through the Priority Care Center, to receive the right care, at the right time, by the right provider.

# The 10 Building Blocks of High-Performing Primary Care





# ADT in practice

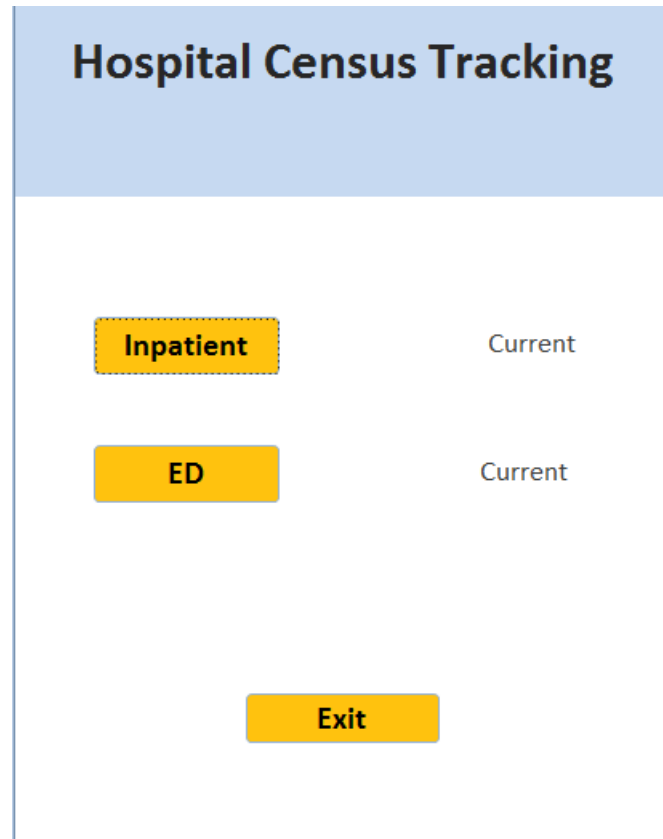
NCHIIN receives real-time ADT messages from local hospitals

System looks for:

- Admit
- Discharge
- Transfer

IT department collects 24-hours worth of messages and imports data to hospital census tracking.

# Internal ADT Tracking Process



# ER Tracking

Emergency Department Visits									
Delete	Addressed	Additional Information	Found In	Current		All		Refresh	
				Last	First	DOB	Primary Complaint	Visit Date	Insurance
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	eCW			6/24/1987	WEAKNESS	11/19/2017 10:24:00 PM	BLUE CROSS BLUE SHIELD OUT OF STATE - O/O
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	eCW			8/23/1955	R SHOULDER PAIN S/P FALL	11/19/2017 9:27:00 PM	BLUE SHIELD OF CA PPO - O/O BLUE SHIELD OF CA
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	eCW			4/11/1975	FLANK PAIN	11/19/2017 9:06:00 PM	BlueCrossPPO CovrdCA IFP;
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	eCW ACO			10/1/1952	HURTS TO PEE; INFECTED EAR	11/19/2017 7:04:00 PM	MEDICARE - O/O MEDICARE - O/O
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	eCW			9/8/1964	FAST HEART RATE, ANXIETY	11/19/2017 6:55:00 PM	BlueCrossPPO CovrdCA IFP;
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	eCW ACO			10/30/1974	MED EVAL	11/19/2017 4:46:00 PM	Blue Cross PPO - Employee;
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	eCW ACO			9/26/1965	MED EVAL (AMB)	11/19/2017 4:37:00 PM	Blue Cross EPO CovCA;
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	eCW			5/8/1991	ECZEMA OUTBREAK	11/19/2017 4:10:00 PM	

# Inpatient Tracking Sheet

Inpatient Tracking																	
Delete		Found In	Date of Entry	Staff member entering Admit	RN Care Coord	UM RN	Admit Date	Discharge Date	NCHIIN Discharge Date	DOB	Last name	First name	Ins Plan	Hospital/ Facility	Room No.	Reason for admission	PCP
<input type="checkbox"/>	eCW ACO	11/21/2017	NCHIIN Import				11/20/2017			8/15/1998				RMH		INDUCTION FOR POSTDATES	
<input type="checkbox"/>		11/21/2017	NCHIIN Import				11/20/2017			10/20/1980				SJH		PERTERM CONTRACTIONS	
<input type="checkbox"/>	eCW ACO	11/21/2017	NCHIIN Import				11/20/2017			11/15/1956				RMH		RIGHT HIP OSTEOARTHRITIS	
<input type="checkbox"/>	eCW ACO	11/18/2017	NCHIIN Import	Karen			11/17/2017			7/21/1954				SJH		FEVER;R/O PNEUMONIA	
<input type="checkbox"/>	eCW ACO	11/18/2017	NCHIIN Import	Karen			11/17/2017			6/6/1965				RMH		ECOLI,SEPSIS ESBL URINE	
<input type="checkbox"/>	eCW	11/18/2017	NCHIIN Import	Jen	kristyn		11/17/2017			1/5/1953				SJH		OPEN ABDOMINAL WOUND	
<input type="checkbox"/>	eCW	11/18/2017	NCHIIN Import	Jen	kristyn		11/17/2017		11/19/2017	12/12/1953				SJH		CP,CHEST PAIN	
<input type="checkbox"/>	eCW ACO	11/18/2017	NCHIIN Import	Jen			11/17/2017		11/18/2017	12/20/1985				SJH		INDUCTION OF LABOR	
<input type="checkbox"/>	eCW ACO	11/17/2017	NCHIIN Import	Karen			11/16/2017		11/19/2017	4/19/1956				SJH		CHOKING/SOB,SEPSIS PNEUMONIA_CAP	
<input type="checkbox"/>	eCW ACO	11/17/2017	NCHIIN Import	Karen			11/16/2017		11/20/2017	8/20/1960				SJH		BILATERAL L4-5 DECOMPRESSION	
<input type="checkbox"/>	eCW ACO	11/15/2017	NCHIIN Import	jen			11/14/2017		11/19/2017	9/12/1986				RMH		IOL PD	
<input type="checkbox"/>	eCW	11/15/2017	NCHIIN Import		kristyn		11/14/2017		11/17/2017	3/1/1984				SJH		SOB; CP; LEG PAIN,SADDLE EMBOLUS	
<input type="checkbox"/>	eCW ACO	11/15/2017	NCHIIN Import	Karen			11/14/2017		11/18/2017	3/12/1956				SJH		GI,UPPER GI BLEED; ACUTE	

# Inpatient Tracking

11/18/2017	NCHIIIN Import	Karen		11/18/2017		SJH	FEVER;R/O PNEUMONIA
11/18/2017	NCHIIIN Import	Karen		11/18/2017		RMH	ECOLI,SEPSIS ESBL URINE
11/18/2017	NCHIIIN Import	Jen	kristyn	11/18/2017		SJH	OPEN ABDOMINAL WOUND
11/18/2017	NCHIIIN Import	Jen	kristyn	11/18/2017		SJH	CP,CHEST PAIN
11/18/2017	NCHIIIN Import	Jen		11/18/2017		SJH	INDUCTION OF LABOR

Refresh patients already seen

Do you want to skip initial pop-ups?

Reasons to click 'Yes'...

You don't need to see a pop-up for every entry made since this application was closed.

OR

Application has never been run with your login information.

Yes

No

# A Team Approach to Using ADT Data

Inward MA



Reviews lists  
Creates tasks  
Low acuity to  
MA  
High acuity to  
RN  
Inpatient to NP

Outward MA



Follows up calls  
to ER patients  
Offers Care  
Coordination

RN Care Coordinator



Follows up calls  
to ER and  
inpatient  
Offers Care  
Coordination  
Home visits  
Patient  
accompaniment

Nurse Practitioner



Daily hospital  
rounds  
Delegates tasks  
to team





# Lessons Learned

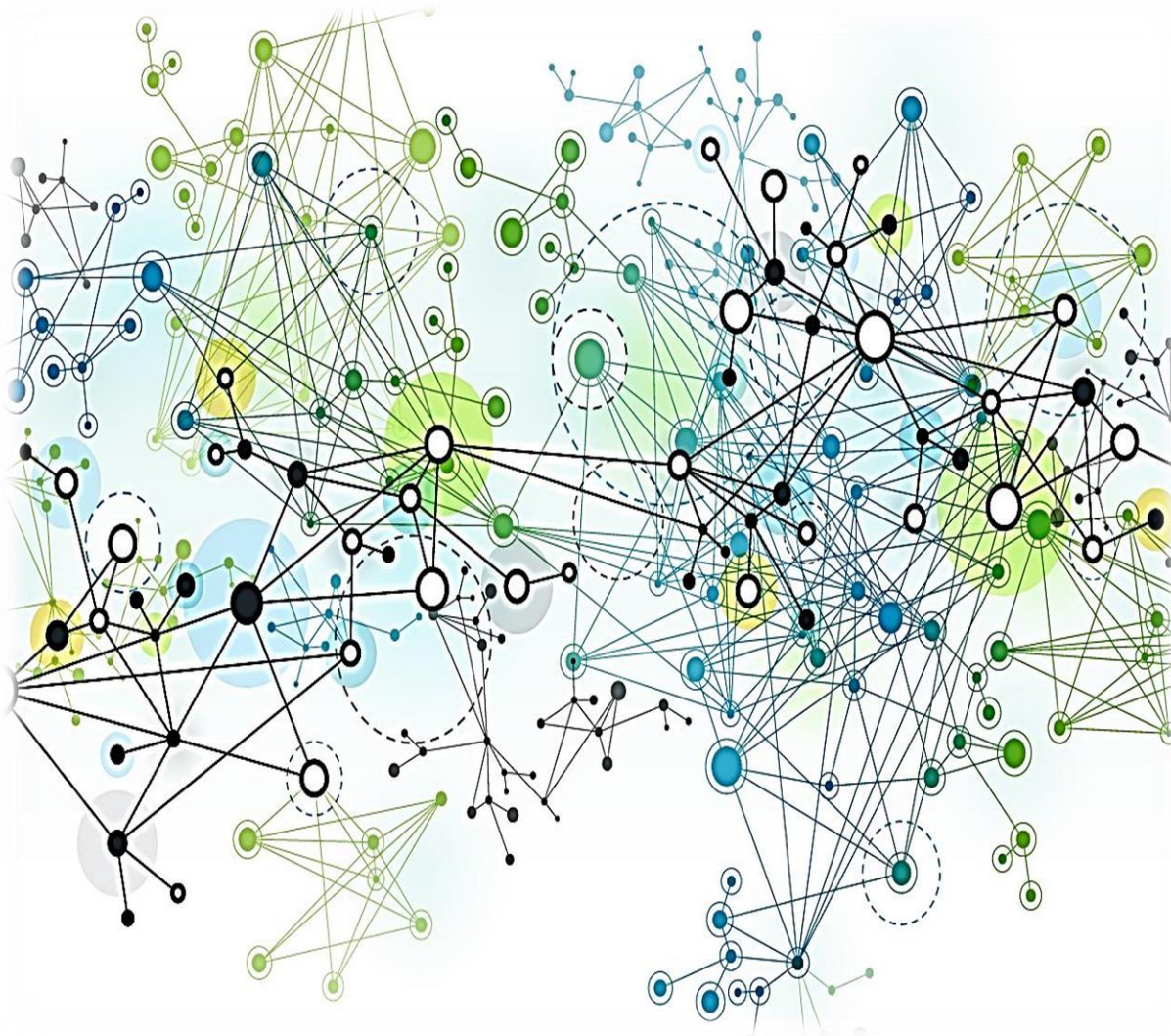
- Data to Information
  - Information should be defined by the recipient
- Who the data goes to is important (what person on the care team...)
  - Who sorts and disseminates the data?
- Trust:
  - In systems
  - In training
  - In data
- Commitment to Continual QI:
  - Identifying and responding to challenges
  - Making modification based on needs
  - Team agency to make change
- Consistency of Engaged Leadership:
  - Administrative Level
  - Clinical Level

# Our Team





# Feedback, Questions, Discussion



“Data moves at the speed of trust.”

--David Ross, ScD  
Public Health  
Informatics Institute

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# Using RCHIE to Transform Care

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Lisa Israel, MBA, CPHQ, CPHIMS  
HIT Project Manager  
Redwood Community Health Coalition



Serving Sonoma, Napa, Marin & Yolo Counties

# Current RCHIE Environment



- Nine health centers participating (the 9<sup>th</sup> was added yesterday!)
- All are eClinicalWorks users
- Data goes to RCHC's Hub using eEHX platform
  - eEHX is a product of eClinicalWorks
- Hub is available to non-eCW users

# History/Timeline of RCHIE

