Statewide HIE Issues

Indiana Council of Community Mental Health Centers

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Director of Clinical Operations

Objectives

❖ Describe varied services from HIE to HIE

❖ Identify the IHIT activities and issues with CCD/CCDA or the exchange of data after the end of IHIT

❖ Present HealthLINC and its priorities/service model

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HealthLINC Services

❖ Results delivery to those with and without EMRs

❖ Meaningful Use coaching

❖ Health IT education for rural areas (grant with IRHA, Ivy Tech)

❖ Implementing and understand value of **Alerts** for managing patient care and reducing ED usage/$$

❖ Grasp **Community Medication Management** as next step for care quality

- Why community based and importance of behavioral health in the mix

- Explain how different "actors" find different value

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Maintaining Privacy/Security

❖ DIRECT – national standard for secure email for sharing private health information

  – Address book readily available within
  – More of challenge across entities

❖ Stand alone version

❖ Available within EMRs for Stage 2 or soon afterwards

❖ DIRECT TRUST as a federated model for Direct.

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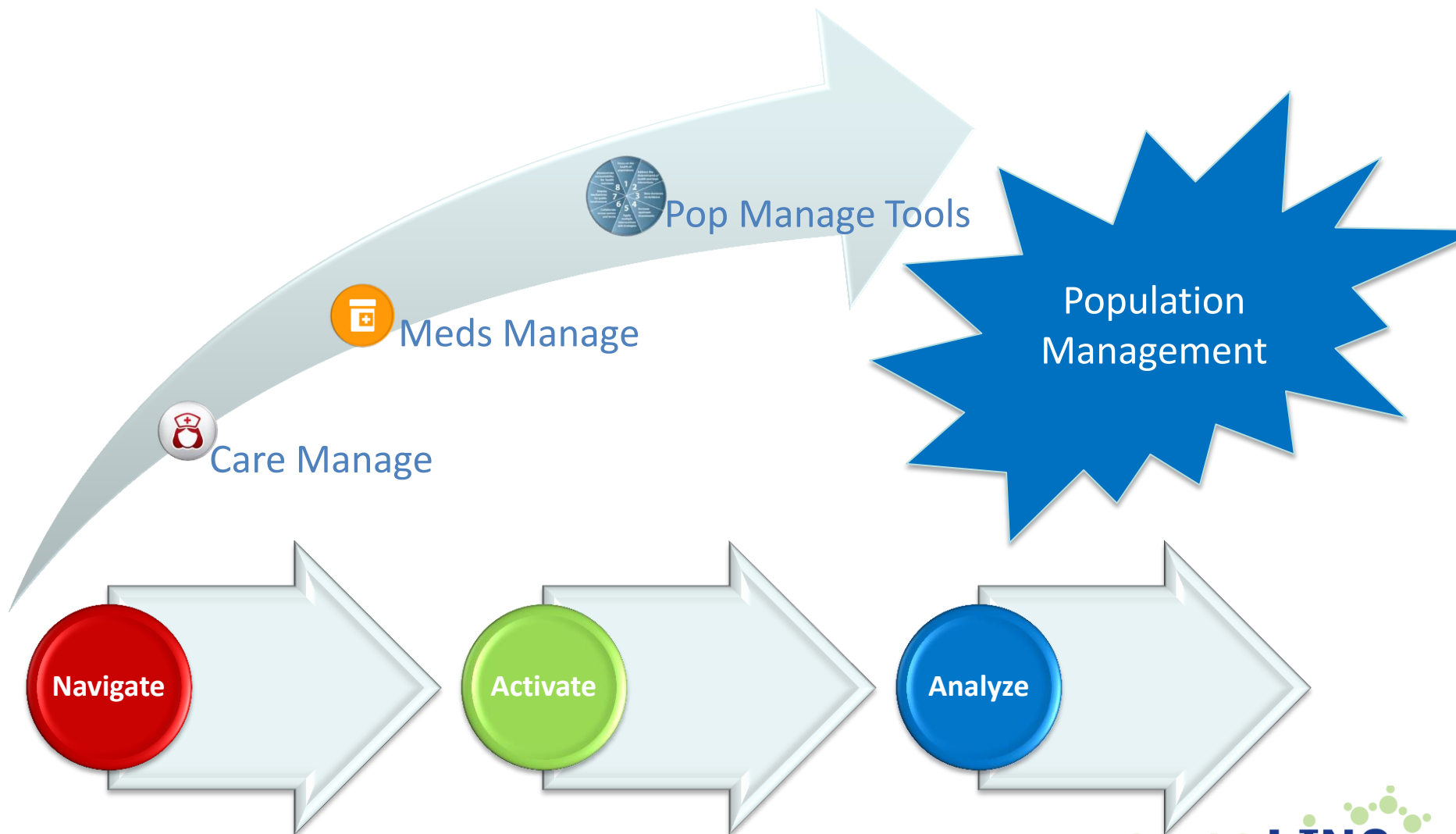CONNECT. CARE. COLLABORATE.

The **Community** Approach

Data Delivery

❖ Results from multiple senders delivered to ordering or cc'd providers

❖ Readily available electronically

– Inboxes

– Electronic Medical Record interfaces (lands where the doctor works all day)

– Lab, Rad, Transcription primarily

– Other types at times

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Population Management to Reduce Unnecessary Care
Quick Wins and High Value

Pop Manage Tools

Meds Manage

Care Manage

Population Management

Navigate

Activate

Analyze

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Start with ALERTS

8 week process for HealthLINC

❖ Data senders engagement

❖ Practice engagement:

   – Patient panels

   – Customizations

   – Receiving the Alerts

   – Working the Alerts

❖ Testing

❖ Live

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Who are MY patients?

Dr. Smith

Dr. Jones

Consenting

800-55,000 in size

Ped Group

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Where do **Alerts** come from?

❖ Hospitals mostly   --- called ADTs

– If visit Emergency Department

– If admitted to Observation

– If admitted as Inpatient

– Upon discharge as an inpatient

❖ Can use urgent care

❖ Includes the chief complaint

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Match ADTs to Your patients

admissions, discharges, transfers

ADT ADT ADT ADT ADT AD ADT ADT ADT ADT ADT ADT ADT ADT ADT ADT ADT ADT ADT ADT

Any **matches** flow onto a daily report delivered to your team via DIRECT

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My patients' care outside office

Patient La	Patient Fi	DOB	Patient ID	Date of Ad	Date of Di	Facility	Visit Type	Chief Con	Med Rec I	Home Pho	PCP	Insurance	Trad MCR
				#########		BHE_ADT (	O	DIARRHEA; DIARRHEA			Lupov, Mackenzie		
				#########		BHE_ADT (	E	Abdominal pain			Lang, Vincent		
				#########		BHE_ADT (	E	Psychiatric evaluation			Test, Doctor		
				#########		BHE_ADT (	I	OSTEOARTHRITIS OF RIGHT KNE			Wible, Hayley		MCR
				#########		BHE_ADT (	I	RIGHT KNEE OSTEOARTHRITIS; F			Lee, Susan		MCR
				#########		BHE_ADT (	E	Dizzy			Lee, Susan		
				#########		BHE_ADT (	E	Abdominal pain			Ruedlinger, Sonya		
				#########		BHE_ADT (	E	Abdominal pain			BANNEC, ERIC ANDREW MD		
				#########		BHE_ADT (	O	NEAR SYNCOPE, LOW BP; NEAR			Lee, Susan		
				#########		BHE_ADT (	I	DIARRHEA; DIARRHEA			Lupov, Mackenzie		
				#########		BHE_ADT (	E	MVA			Lulich, Meredith		
				#########		BHE_ADT (	E	Cough - URI symptoms			Knabel, Eric		
				#########		BHE_ADT (	E	Arrhythmia			PCP, PAPER PATIENT		
				#########		BHE_ADT (	I	DIARRHEA; DIARRHEA			Swanson, Diana		MCR
				#########		BHE_ADT (	E	Area over the left foot appears			Lang, Vincent		
				#########		BHE_ADT (	O	HYPERTENSIVE EMERGENCY; HY			Stearley, John		MCR
				#########		BHE_ADT (	E	URI symptoms			Wells, Barbara		
				#########		BHE_ADT (	I	OVERDOSE; OVERDOSE			Wilkins, Noel		
				#########		BHE_ADT (	E	MVA			Colglazier, Cynthia		
				#########	########	BHE_ADT (	I				Lang, Vincent		MCR
				#########		BHE_ADT (	I	ALCOHOL ABUSE; ALCOHOL ABI			Wells, Barbara		MCR
				#########		BHE_ADT (	E	Feels generally weak, Near syn			Stearley, John		

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Types of Practices using **Alerts**

❖ Not just primary care, but key here

❖ Accountable Care Organizations

❖ Behavioral Health

❖ University Student Clinics

❖ OB Care Providers

❖ Safety Net Clinics like VIM

❖ Agency on Aging

❖ Home Health Care – real time in Cincy
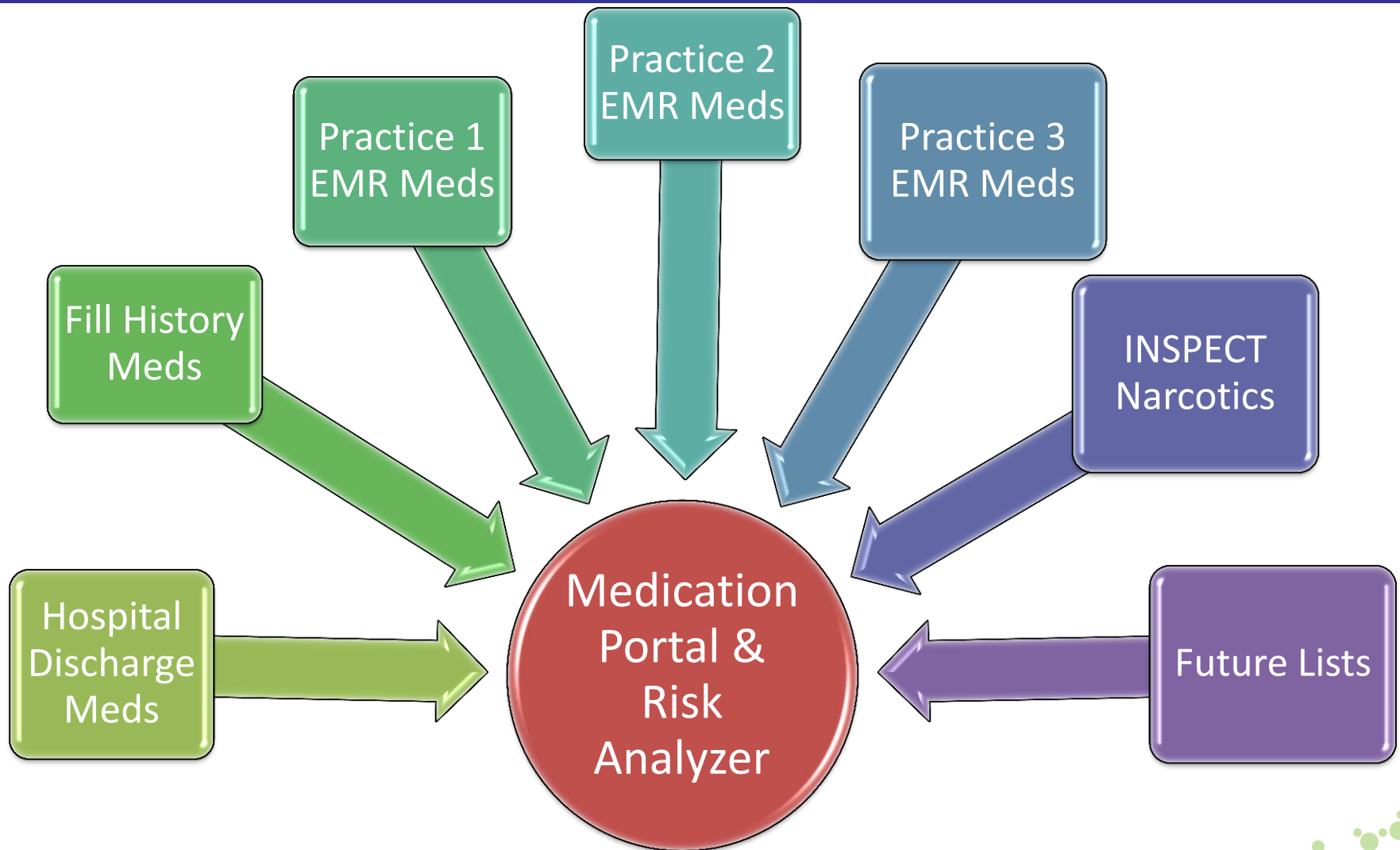
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Got the list; what now?

❖ Staff review the list and slice and dice, copy, share within the practice,…

❖ Patients are called for follow up, for home health care plans, just to check on

❖ Opportunity to reconcile meds verbally, assure home plan is in order

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Community Medication Management

❖ Important to remember patients are often involved in **MANY** systems of care

❖ Bloomington belief—

– "There is no such thing as the absolute, correct medication list or ultimate source of truth"

– It is an ever-changing list that must be complied from many sources

Community-wide Medication Management

Practice 1
EMR Meds

Practice 2
EMR Meds

Practice 3
EMR Meds

Fill History
Meds

INSPECT
Narcotics

Hospital
Discharge
Meds

Medication
Portal &
Risk
Analyzer

Future Lists

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Primary Care	Specialty Care	Hospital Discharge	Fill History
EMR Data Feed	EMR Data Feed	Discharge Hospital Data Feed	Fill History
List:IUHSIP	List:Premier	List:IUHB	List:Automated Feed
Site:IUHSIP	Site:Premier	Site:IUHB	Site:Automated Feed
Automated Feed	Automated Feed	Automated Feed	Jennifer Reiter
5/27/2014	3/28/2014	3/11/2014	5/28/201 (Draft
ALDACTONE TAB 25MG daily | 0.00 | 0d MICHAEL A HAMILTON			SPIRONOLACTONE TAB 25MG 5/26/2014 | 30.00 | 30d CARTER HENRICH
ALENDRONATE SODIUM TAB 70MG 1 Tablet weekly | 0.00 | 0d MICHAEL A HAMILTON	ALENDRONATE SODIUM TAB 70MG take as directed weekly | 0.00 | 0d	ALENDRONATE SODIUM TAB 70 mg every monday | 0.00 | 0d GREGORY M SUTLIFF	ALENDRONATE SODIUM TAB 5/13/2014 | 4.00 | 27d ERICH WEIDENBENER
ASPIRIN ENTERIC COATED ADULT 1 Tablet Delayed Release daily | 0.00 | 0d MICHAEL A HAMILTON	ADULT ASPIRIN LOW STRENGTH 1 qd | 0.00 | 0d	ASPIRIN ADLT TAB 81MG 81 mg oral | 0.00 | 0d GREGORY M SUTLIFF	
	ATENOLOL TAB 50MG 1 daily TAKE 1 TABLET BY | 30.00 | 0d CARTER F HENRICH	ATENOLOL TAB 50MG 50 mg once daily | 0.00 | 0d GREGORY M SUTLIFF	ATENOLOL TAB 50MG 4/14/2014 | 30.00 | 30d CARTER HENRICH
COREG TAB 6.25MG two times daily | 0.00 | 0d MICHAEL A HAMILTON	*Community Med Aggregation*		CARVEDILOL TAB 6.25MG 4/22/2014 | 60.00 | 30d CARTER HENRICH
	DOXEPIN HCL CAP 75MG | 0.00 | 0d		
ENALAPRIL MALEATE TAB 20MG	ENALAPRIL MALEATE TAB 20MG	VASOTEC TAB 20MG	ENALAPRIL MALEATE TAB 20MG

Adult Use case

Behavioral Health

- Patient has mental health illness on medication

- Lost 80 pounds in self improvement program but still had MI

- Stopped medications, including psych medications, due to being discouraged

Student Use Case

❖ Freshman Student seen with flu symptoms and treated at Clinic

❖ Shows up in ED with alcohol intoxication

❖ Alert to Clinic prompts copy of ED visit to usual provider for that student

❖ Provider reaches out to student for clinic follow-up

❖ During follow-up appt, other needs can be explored

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Future

❖ Soon, receive Patient feedback re their medications

❖ For Clinical folks, patient context from Med Manage into EMR

❖ All users, tasking across practices

  – Direct

  – CCD

  – Or in Med Manage

❖ Device focus--the more portable the better

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Thank you
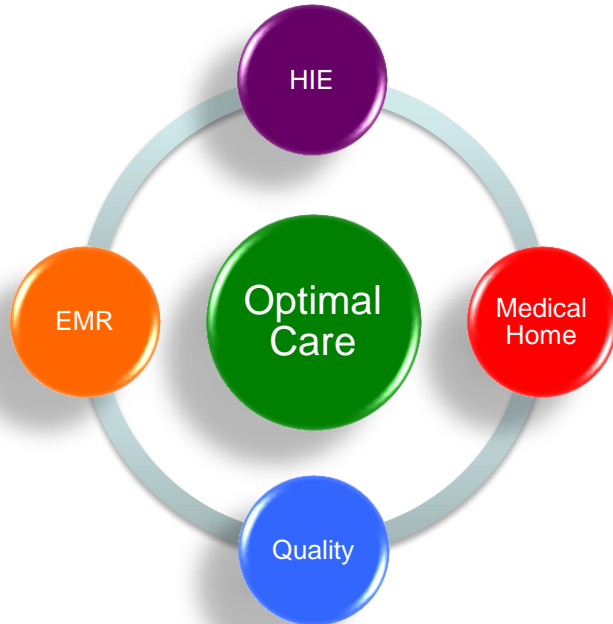
- **Questions/Comments**

- HealthLINC is an Health Information Exchange focused on Quality Patient Care

- HealthBridge provides the technology for HealthLINC

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Indiana Health Information Exchange

Better Outcomes. Delivered.

ADT Alerts & Clinical Data Reports Overview

IHIE Background

- Nation's largest HIE
  - 101 hospitals (38 health systems)
  - 40,000 clinicians
  - Payors
  - Labs and Imaging Centers
  - Public Health
- Founded in February 2004
- 501c3 not-for-profit organization
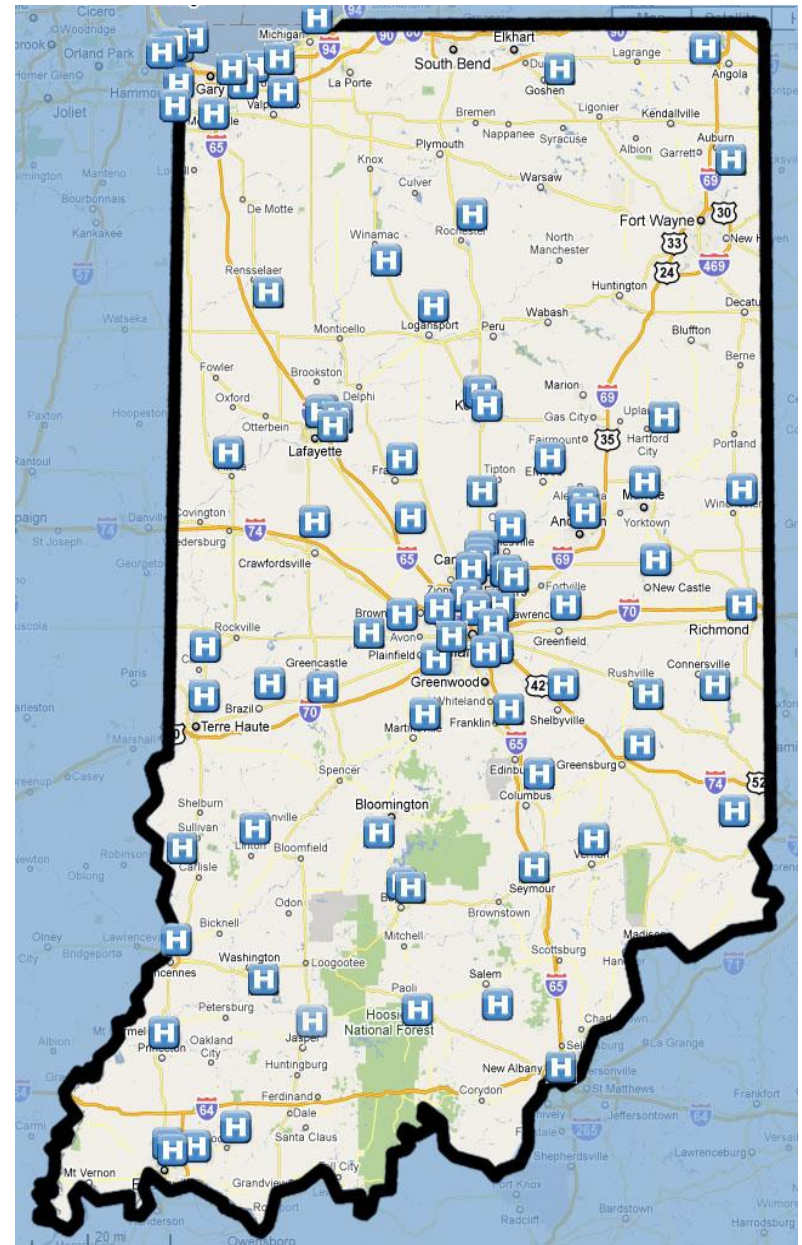
ADT Alerts

ADT Alerts reports enable ACOs to:

- Track where and when care has been delivered, especially if outside of the ACO Network

- Examine the patient's chief complaint

- Process the preliminary diagnosis

- Optimize care site transitions

- Identify providers in the continuum of care

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ADT Alerts with Counts

For each Inpatient encounter in the report, find all other Inpatient encounters whose admission date is within 180 days of the reported encounter admission date, and show the number of such encounters falling into each of the following six time intervals:

- 0-30 days
- 31-60 days
- 61-90 days
- 91-120 days
- 121-150 days
- 151-180 days.

For each Emergency encounter in the report, find all other Emergency encounters whose admission date is within 180 days of the reported encounter admission date, and show the number of such encounters falling into each of the same six time intervals as for Inpatient encounters.

ADT Alerts to Reduce ED Admissions

Results of a 6 month pilot with a managed healthcare plan in Indiana:

- 53% reduction in non-urgent Emergency Department visits

- 68% increase in Primary Care office visits

- Nearly $4 million saved

Field	Name	Data Type	Max Length	Format	Description
1	AdmitDate	Date	8	YYYYMMDD[,2]	Date of admission, blank if not available
2	AdmitTime	Time	4	HHMM[1,3]	Time of admission (24 hour clock from 0 to 23), blank if not available.
3	DischargeDate	Date	8	YYYYMMDD	Date of discharge, blank if not available
4	DischargeTime	Time	4	HHMM	Time of discharge (24 hour clock from 0 to 23), blank if not available.
5	AdmitType	String	1		Admission type: O = Outpatient, I = Inpatient, E = Emergency
6	HospitalName	String	200		Name of the facility
7	LastName	String	50		Patient last name
8	FirstName	String	50		Patient first name
9	SSN	Number	9	#########	Patient's social security number, either 9 digits or blank if not available
10	MRN	String	20		Patient MRN as supplied in the original enrollment file
11	Gender	String	1		Gender: F = Female, M = Male, U = unknown, blank if not available
12	DateOfBirth	Date	8	YYYYMMDD	Patient date of birth, blank if not available
13	DateOfDeath	Date	8	YYYYMMDD	Patient date of death, blank if the patient is living or the date is not available
14	Address1	String	50		Patient address, line 1
15	Address2	String	50		Patient address, line 2
16	City	String	50		Patient city
17	State	String	2		Patient state abbreviation
18	ZipCode	String	10		Patient zip code
19	OptOutDate	Date	8	YYYYMMDD	Date the patient opted out of the ACO, blank if the patient has not opted out or the information was not supplied in the enrollment file
20	Stratification	Number	3	###[4]	Value ranging from zero to 255, indicating the patient's risk level according to the ACO, with lower values indicating higher risk. If the information was not supplied in the enrollment file, the value in this field will always be zero.
21	Race	Number	1	#	Patient race supplied in the enrollment file: 0 = Unknown, 1 = White, 2 = African-Amercian, 3 = Other, 4 = Asian/Pacific Islander , 5 = Hispanic, and 6 = Native American/Alaska Native.
22	Diag_CD_01	String	10		First diagnosis code, or blank if not available
23	Diag_TY_01	Numeric	1	#	Type of this diagnosis code: 0 = No code, 1 = ICD-9, and 2 - ICD-10. Blank if no code or description is present.
24	Diag_DE_01	String	200		Description of this diagnosis or blank if not available
25	Diag_CD_02	String	10		Second diagnosis code, or blank if not available
26	Diag_TY_02	Numeric	1	#	Type of this diagnosis code: 0 = No code, 1 = ICD-9, and 2 - ICD-10. Blank if no code or description is present.

27	Diag_DE_02	String	200		Description of this diagnosis or blank if not available
28	Diag_CD_03	String	10		Third diagnosis code, or blank if not available
29	Diag_TY_03	Numeric	1	#	Type of this diagnosis code: 0 = No code, 1 = ICD-9, and 2 - ICD-10. Blank if no code or description is present.
30	Diag_DE_03	String	200		Description of this diagnosis or blank if not available
31	Diag_CD_04	String	10		Fourth diagnosis code, or blank if not available
32	Diag_TY_04	Numeric	1	#	Type of this diagnosis code: 0 = No code, 1 = ICD-9, and 2 - ICD-10. Blank if no code or description is present.
33	Diag_DE_04	String	200		Description of this diagnosis or blank if not available
34	Diag_CD_05	String	10		Fifth diagnosis code, or blank if not available
35	Diag_TY_05	Numeric	1	#	Type of this diagnosis code: 0 = No code, 1 = ICD-9, and 2 - ICD-10. Blank if no code or description is present.
36	Diag_DE_05	String	200		Description of this diagnosis or blank if not available
37	Diag_CD_06	String	10		Sixth diagnosis code, or blank if not available
38	Diag_TY_06	Numeric	1	#	Type of this diagnosis code: 0 = No code, 1 = ICD-9, and 2 - ICD-10. Blank if no code or description is present.
39	Diag_DE_06	String	200		Description of this diagnosis or blank if not available
40	Diag_CD_07	String	10		Seventh diagnosis code, or blank if not available
41	Diag_TY_07	Numeric	1	#	Type of this diagnosis code: 0 = No code, 1 = ICD-9, and 2 - ICD-10. Blank if no code or description is present.
42	Diag_DE_07	String	200		Description of this diagnosis or blank if not available
43	Diag_CD_08	String	10		Eighth diagnosis code, or blank if not available
44	Diag_TY_08	Numeric	1	#	Type of this diagnosis code: 0 = No code, 1 = ICD-9, and 2 - ICD-10. Blank if no code or description is present.
45	Diag_DE_08	String	200		Description of this diagnosis or blank if not available
46	Diag_CD_09	String	10		Ninth diagnosis code, or blank if not available
47	Diag_TY_09	Numeric	1	#	Type of this diagnosis code: 0 = No code, 1 = ICD-9, and 2 - ICD-10. Blank if no code or description is present.
48	Diag_DE_09	String	200		Description of this diagnosis or blank if not available
49	Diag_CD_10	String	10		Tenth diagnosis code, or blank if not available
50	Diag_TY_10	Numeric	1	#	Type of this diagnosis code: 0 = No code, 1 = ICD-9, and 2 - ICD-10. Blank if no code or description is present.
51	Diag_DE_10	String	200		Description of this diagnosis or blank if not available
52	Institution	String	100		Name of the institution that sent the original message
53	OrganizationFormalName	String	100		Formal name of the organization where service was performed (if available)
54	LocationFormalName	String	100		Formal name of the location where service was performed (if available)
55	LocationDescription	String	100		Alternate description of the service location (if available)
56	AttendingName	String	100		Name of the attending physician (if available)
57	ChiefComplaint	String	200		Chief complaint at start of service (if available)

Clinical Results Report

Shows all "in-network" and "out-of-network" lab results generated in the past 24 hours for the people in the client's registry list.

- Lab results are for:
    - HbA1c
    - LDL-C
    - HDL
    - Total Cholesterol
    - Triglycerides
    - BUN
    - Creatinine
    - CarboxyHemoglobin
    - Microalbuminuria
    - Lead Screening
    - Cervical Cancer Screening
    - Chlamydia

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Field	Name	Data Type	Max Length	Format	Description
1	InsuranceID	String	11		Member insurance number. For a Medicare patient, this could be the Medicare ID (HIC).
2	LastName	String	50		Member last name.
3	FirstName	String	50		Member first name.
4	SSN	Number	9	#########	Member social security number, either 9 digits or blank if not available.
5	MRN	String	20		Member MRN as supplied in the original registry file.
6	Gender	String	1		Member gender: F = Female, M = Male, U = unknown, or blank if not available.
7	DateOfBirth	Date	8	YYYYMMDD.2	Member date of birth. Blank if not available.
8	DateOfDeath	Date	8	YYYYMMDD	Member date of death. Blank if the patient is living or the date is not available.
9	Address1	String	50		Member address, line 1. Blank if not available
10	Address2	String	50		Member address, line 2. Blank if not available
11	City	String	50		Member city. Blank if not available.
12	State	String	2		Member state abbreviation. Blank if not available.
13	ZipCode	String	10		Member zip code. Blank if not available.
14	Phone	String	12		Member phone number. Blank if not available.
15	Email	String	30		Member email address. Blank if not available.
16	ResultID	Number	12		Unique ID of the lab result.
17	ResultDate	Date	8	YYYYMMDD	Date the lab test result was generated.
18	ResultTime	Time	4	HHMM	Time the lab test result was generated.
19	ResultValueDesc	String	100		Identifies the kind of lab result (e.g., HbA1c, HDL, LDL-C, etc).
20	ResultValueDataType	String	1		Identifies the data type of the result value (e.g., N=Numeric, T=Test).
21	ResultValue	String	100		Result value in displayable text form.
22	UnitOfMeasure	String	15		Unit of measure for the result value. Blank if not available.
23	ReferenceRange	String	40		Normal range in text form for the result value. Blank if not available.
24	AbnormalFlag	String	1		A single-character code Indicating the normalcy status of the result. Valid values are contained in the HL7 user-defined table 0078. Blank if not available.
25	CodeSystemName	String	9		Name of the standard coding system that the standard code for the lab result belongs to.
26	Code	String	15		Standard code for the lab result.
27	CodeDesc	String	300		Long user-friendly description of the code. This description should explain the term to clinical users in a way that distinguishes it from similar terms.
28	LabFacilityNPINbr	String	10		National Provider Number of the facility that generated the lab result. Blank if not available.
29	LabFacilityName	String	100		Name of the facility that generated the lab result. Blank if not available.

Thank You
Deb Hemler
317-644-1725

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