

Welcome to the Medicaid-SCHIP TA Webinar  
**HIEs for Medicaid and SCHIP Agencies: An Overview  
of Core Characteristics, Components, and Approaches**

June 19, 2008

**Presented by:**

**J. Marc Overhage** – MD, PhD, FACP, FACMI

Director of Informatics, Regenstrief Institute

Regenstrief Professor of Medical Informatics, Indiana University School of Medicine

President and CEO, Indiana Health Information Exchange, Inc.

**Anthony Rodgers** – Director, Arizona Health Care Cost Containment System

\* Please note all participants were placed on mute as they joined the session.

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# Overview

- **Welcome** – Farah Englert, Agency for Healthcare Research and Quality
- **Before We Begin** – Farah Englert
- **Introductions** – Farah Englert
- **Presentations**
  - *HIE: The Indiana Experience*
    - Presented by J. Marc Overhage, MD, PhD, FACP, FACMI
  - *Understanding the Value Proposition and Role of Medicaid/SCHIP in Regional Health Information Exchange*
    - Presented by Anthony Rodgers, Director, Arizona Health Care Cost Containment System
- **Question and Answer** – Farah Englert
- **Closing Remarks** – Farah Englert

# Before we begin...

- Please note all participants were muted as they joined the Webinar.
- If you wish to be unmuted, choose the “raise hand” option to notify the host.
- If you have a question during the presentation, please send your question to ***all panelists*** through the chat. At the end of the presentation, there will be a question and answer period.
- Please e-mail Nicole Buchholz at [nbuchholz@rti.org](mailto:nbuchholz@rti.org) if you would like a copy of today’s presentation slides.
- We are currently in the process of posting all of the TA Webinar presentation slides to the project website.

# ■ Listserv Registration

- Please register for the listserv to receive announcements about program updates and upcoming TA Webinars.
- To register go to <http://healthit.ahrq.gov/Medicaid-SCHIP> .
- Click on “Medicaid-SCHIP Fast Facts” on the left-hand side of the screen.
- There are two ways to register for the listserv:
  - 1. Click the link [Click here to subscribe to the listserv](#) that will open a prefilled e-mail message, enter your name after the text in the body of the message, and send.
  - 2. Send an e-mail message to: [listserv@list.ahrq.gov](mailto:listserv@list.ahrq.gov).  
On the subject line, type: **Subscribe**.  
In the body of the message type: **sub Medicaid-SCHIP-HIT** and **your full name**. For example: sub Medicaid-SCHIP-HIT John Doe.  
You will receive a message asking you to confirm your intent to sign up.



# HIE: The Indiana Experience

Presented by:

**J. Marc Overhage - MD, PhD, FACP, FACMI**

Director of Informatics, Regenstrief Institute

Regenstrief Professor of Medical Informatics, Indiana University School of Medicine

President and CEO, Indiana Health Information Exchange, Inc.

Funded by the Agency for Healthcare  
Research and Quality



# Regenstrief Institute

- Endowed by Sam Regenstrief
- Inventor of the low-cost dishwasher
- Connersville plant produced 40% of the world's dishwashers (at peak)
- Dreamed of the Regenstrief Medical Record System becoming a nationwide phenomenon, and supported its beginning in 1973



# Regenstrief Institute

- Eliminate the logistical problems associated with the paper record.
- Standardize the care process. Deliver information in a more organized and useful way. Actively process this record and provide decision support to clinicians.
- Analyze and understand data to improve the health of populations.

# IHIE's Vision

- The Indiana Health Information Exchange was formed by five hospital systems, the Regenstrief Institute, Biocrossroads, local and state health departments and other prominent organizations in Indiana to help improve the quality, safety, and efficiency of patient care.
- Our vision is to use information technology and shared clinical information to:
  - Improve the quality, safety, and efficiency of health care in the state of Indiana.
  - Create unparalleled research capabilities for health researchers.
  - Establish a model of health information exchange for the rest of the country.

IHIE is "...at the forefront of the effort to strengthen our nation's chaotic healthcare system."

– U.S. News & World Report, August 2005

# Who We Are...

*We are a health information exchange that bridges the gap between paper-based and technology-based medicine to electronically provide patient-specific, clinical information from various sources at the most critical time: the point-of-care.*

## Indiana Health Information Exchange

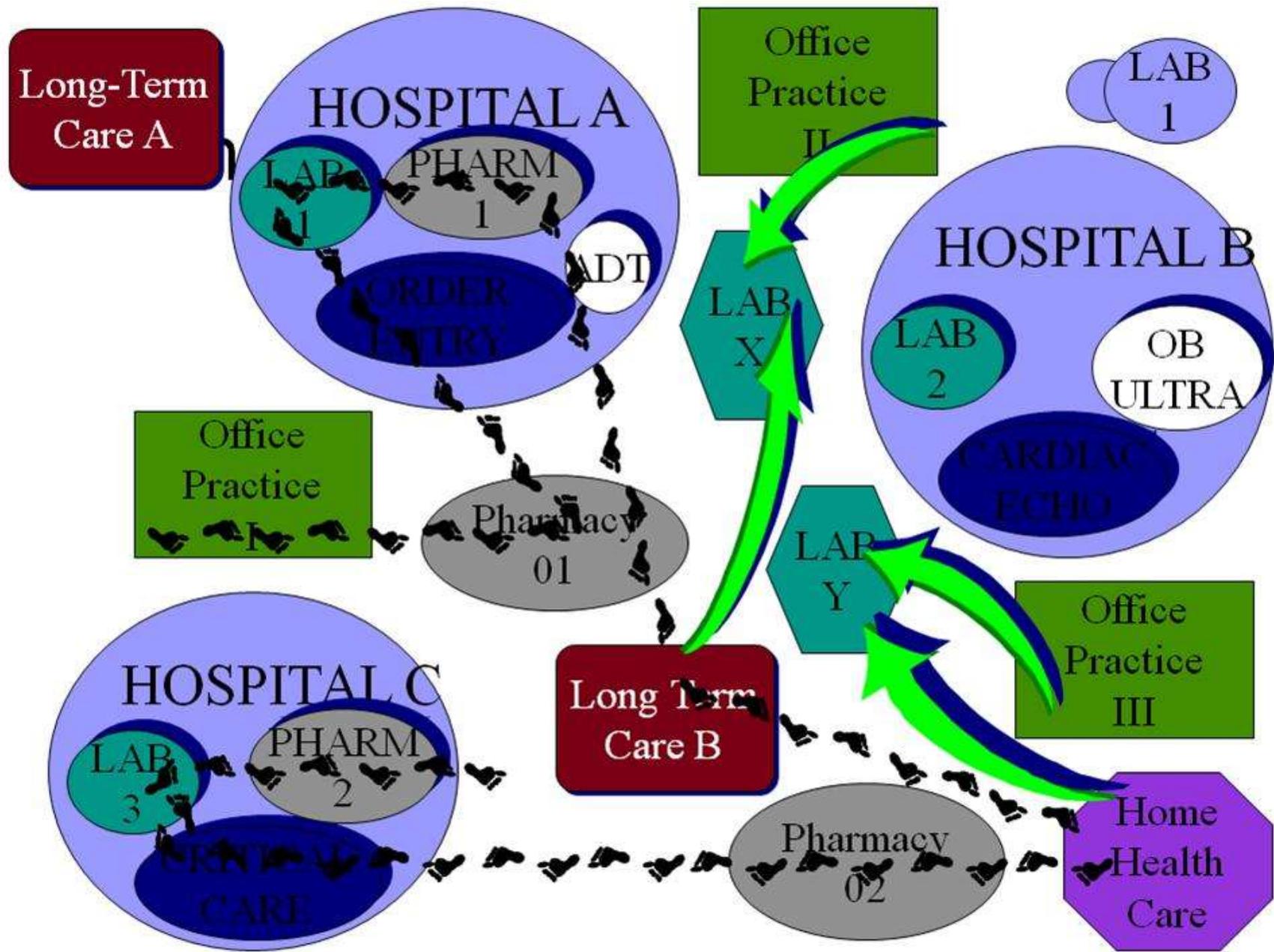
- 34 FTEs
  - 24x7x365 customer support
  - Business development
  - Technical/programming
  - Physician liaisons

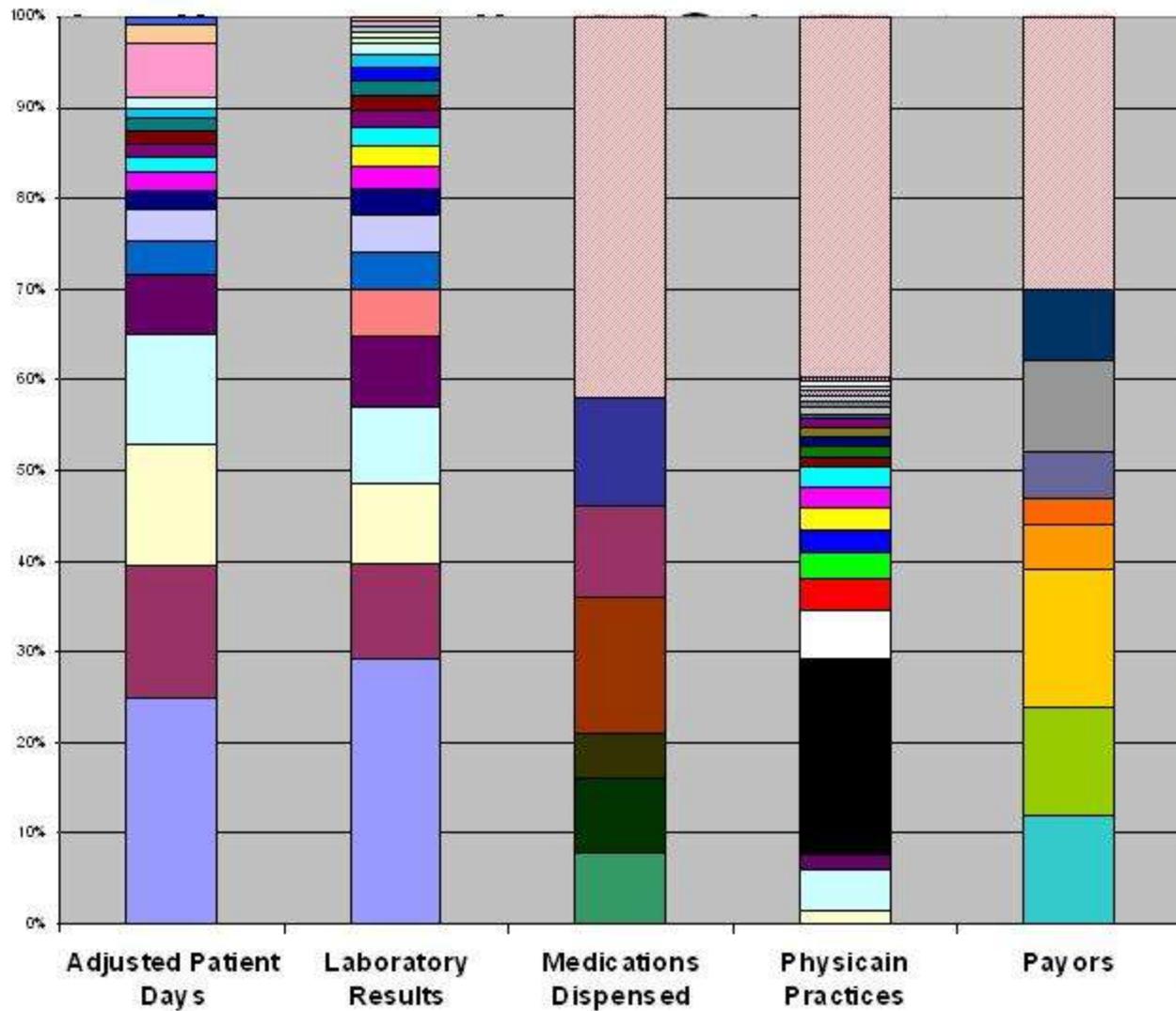
## Regenstrief Institute

- 95 FTEs
  - Research and development
  - Application support
  - Technical support

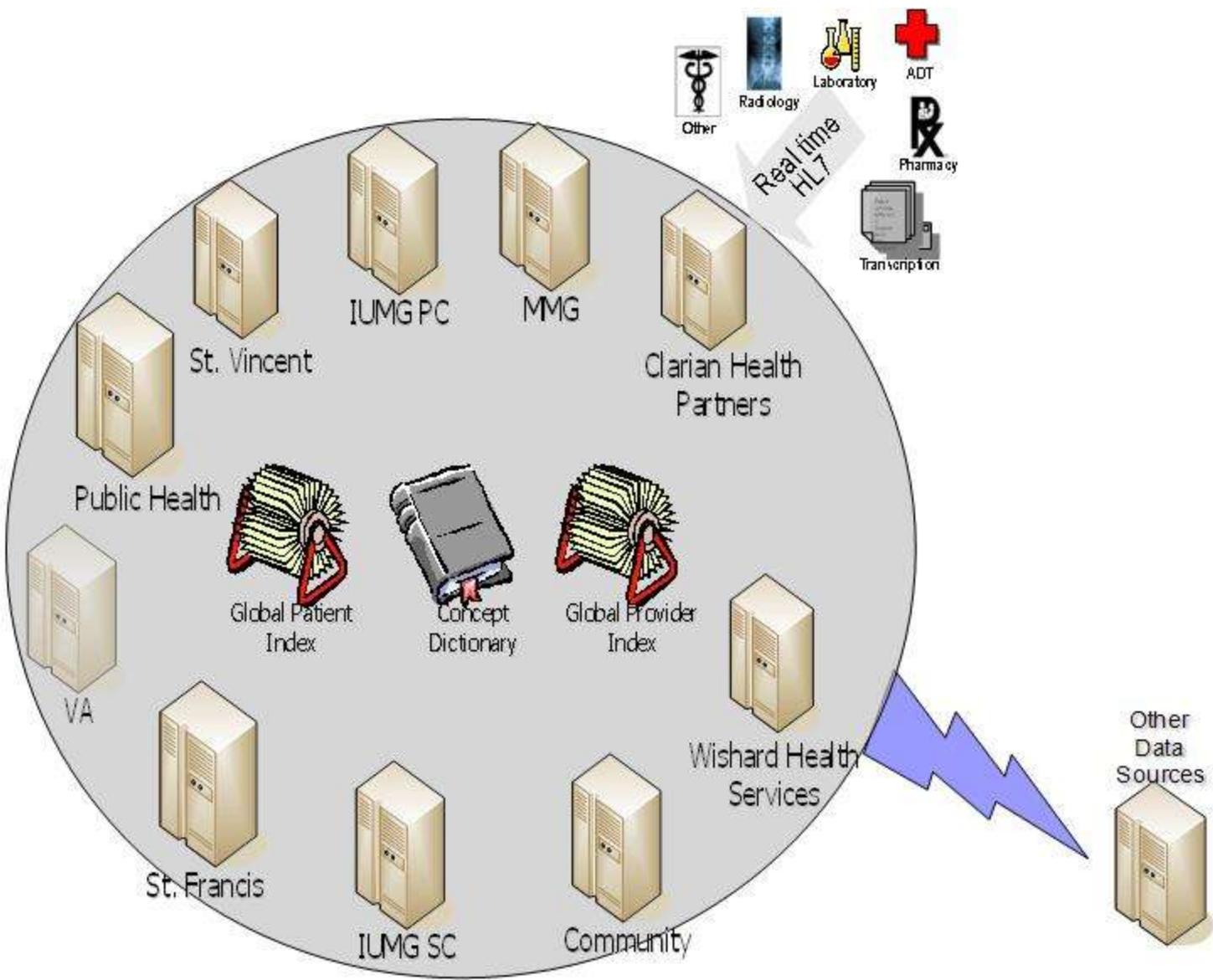
*Indiana Health Information Exchange  
Customer Support*

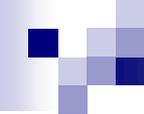
*Why we do what we  
do.....*



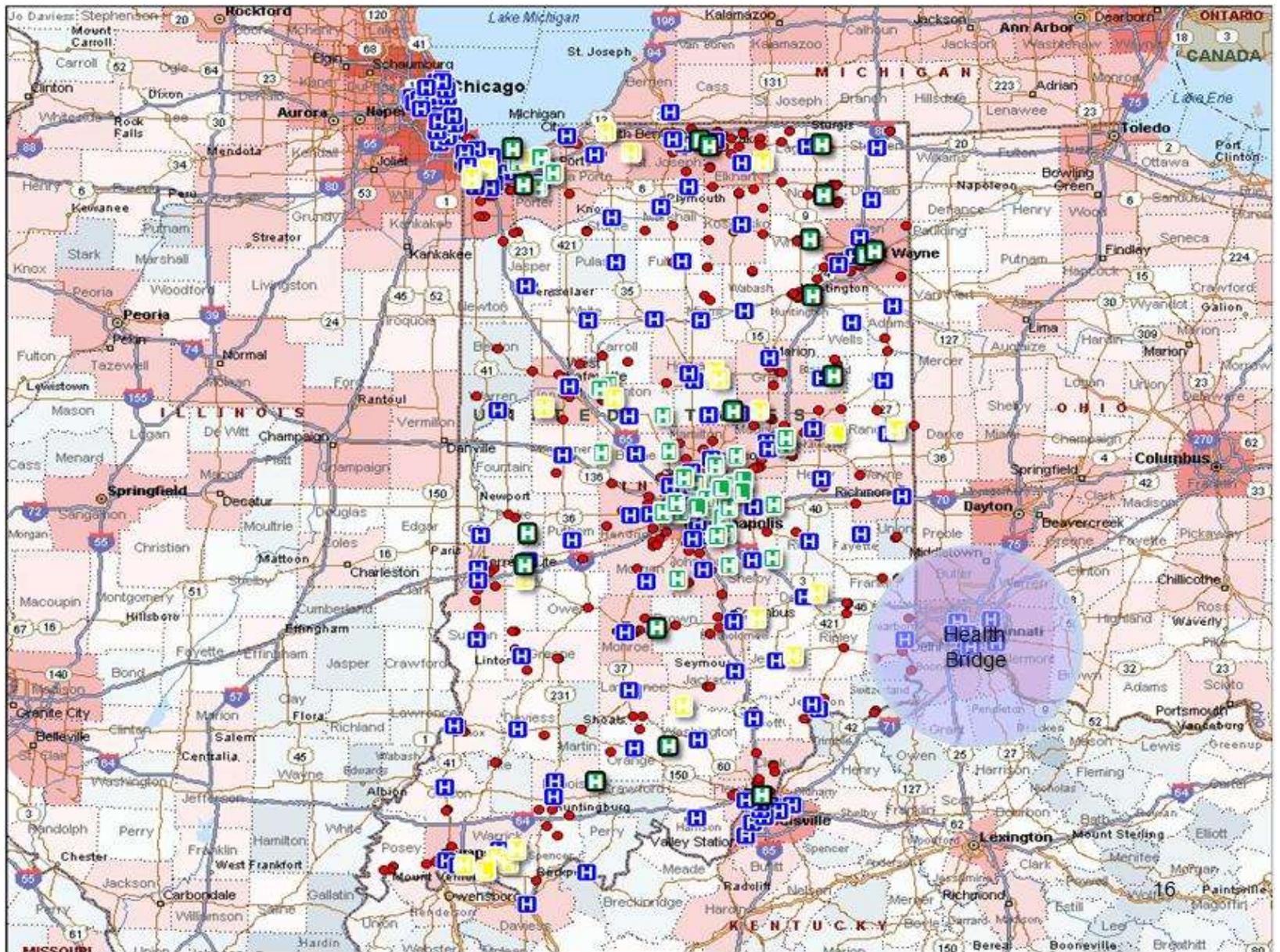


- Other
- Indiana Oral & Maxillofacial Surgery Associates
- Central Indiana Cancer Centers
- Indiana Nephrology & Internal Medicine PC
- Otolaryngology Associates
- Indianapolis Neurology Group
- Indiana Heart Physicians
- Midwest Eye Institute
- Josephson-Wallick-Mislowicz Neurology PC
- Urology of IN
- Peripartum and Critical Care Consultants
- Northwest Radiology
- CorVasco
- Women's Health Partners
- Orthopaedics Indianapolis
- Methodist Medical Group
- Northside Anesthesiology
- Indiana Radiology Partners
- American Health Network
- Care Group LLC
- IUMG-PC
- IUMG-SC
- A HN
- Medical
- Prescription Solutions
- Autism
- Medco Health Solutions
- Express Scripts
- Caremark Rx
- Advantage
- M-Pix
- Himalaya
- Cigna
- United
- Wellpoint
- Medical
- Medicare
- Westview
- Riteview Hospital
- Madison Avenue





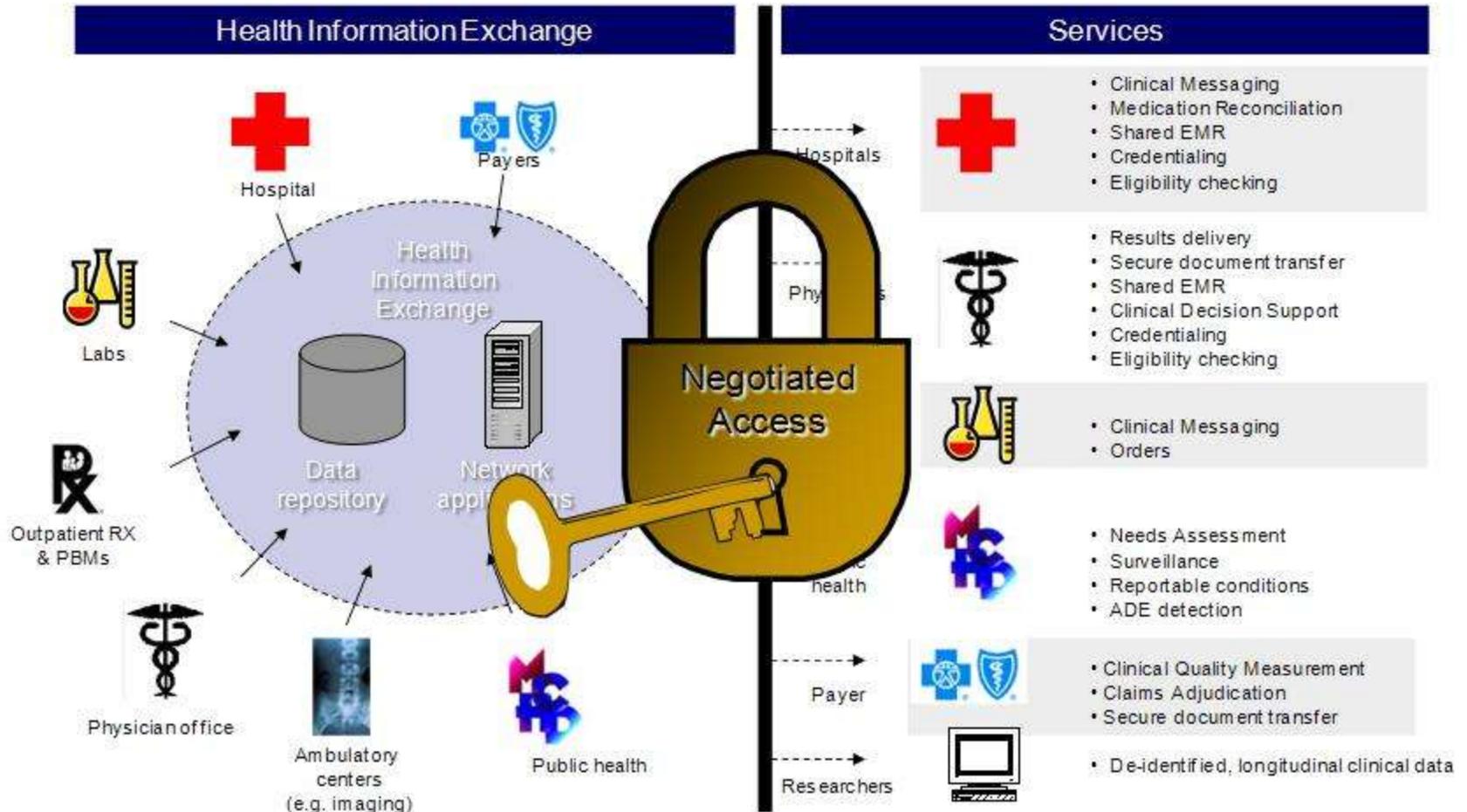
# **WHERE ARE WE?**



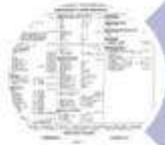


**WHAT DO WE DO?**

# Health Information Exchange Services



# Services (Data Rescue)



## Care process

- Clinical Abstracts (push)
- Results review (pull)
- Clinical messaging (push)



## Patient Safety

- Adverse drug event surveillance
- Medication history



## Quality of care

- Clinical reminders
- Peer comparisons



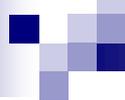
## Public Health

- Statistical surveillance (PHESS)
- Electronic laboratory reporting
- Immunization registry



## Research

- De-identified population queries
- Identified queries



# DOCS4DOCS® Clinical Messaging Service

Getting the **Right** Information  
To the **Right** Provider  
At the **Right** Time  
For the **Right** Patient

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Holds all new documents.

Filters:

Actions:

Provider	MRN	Patient Name	Arrival	Doc Type	Doc Details
<input type="checkbox"/> Bain, David R.			2007 02/10 06:20 PM	Transcription (Clarian)	Sleep Lab (UPDATE ver. 2)
<input type="checkbox"/> Bain, David R.			2007 03/22 12:35 PM	Transcription (St Francis)	History and Physical [Forwarded]
<input type="checkbox"/> Bain, David R.			2007 03/22 12:35 PM	Pathology (St Francis)	Surgical Pathology [Forwarded]
<input type="checkbox"/> Bain, David R.			2007 03/22 12:35 PM	Transcription (St Francis)	Inpatient Operative Report [Forwarded]
<input type="checkbox"/> Bain, David R.			2007 03/22 12:35 PM	Transcription (St Francis)	Discharge Summary [Forwarded]
<input type="checkbox"/> Bain, David R.			2007 01/21 06:38 PM	Microbiology (Clarian EHSC)	Helicobac Som
<input type="checkbox"/> Bain, David R.			2007 03/14 05:50 PM	Path (Clarian)	Surgical Pathology
<input type="checkbox"/> Bain, David R.			2006 11/08 12:20 PM	Transcription (St Vincent)	Outpatient Radiation Oncology Center
<input type="checkbox"/> Bain, David R.			2006 10/26 01:20 PM	Pathology (St Vincents)	Anatomic Pathology Cytology
<input type="checkbox"/> Bain, David R.			2007 03/10 06:30 PM	Lab (St Vincents)	STAT PTT
<input type="checkbox"/> Bain, David R.			2007 03/10 06:30 PM	Lab (St Vincents)	STAT COMP METABOLIC PNL
<input type="checkbox"/> Bain, David R.			2006 10/30 03:20 PM	Lab (Community North)	CBC,ORDERED W/DIFF
<input type="checkbox"/> Bain, David R.			2006 11/09 03:10 AM	Transcription (Community)	CONSULTATION NOTE
<input type="checkbox"/> Bain, David R.			2006 11/09 04:40 AM	Lab (Community North)	CBC,ORDERED W/DIFF
<input type="checkbox"/> Bain, David R.			2007 03/22 12:30 PM	Radiology (St Vincents)	CT LIMITED
<input type="checkbox"/> Bain, David R.			2006 12/11 05:01 PM	Lab (St Vincents)	STAT BASIC METABOLIC PNL
<input type="checkbox"/> Cooper, Jason D.			2006 12/05 03:20 PM	Transcription (St Vincent)	Hospital Procedure Note
<input type="checkbox"/> Cooper, Jason D.			2006 11/21 09:00 AM	Radiology (St Vincents)	MR1 BRAIN WO/WC
<input type="checkbox"/> Cooper, Jason D.			2006 11/06 04:00 PM	Lab (St Vincents)	STAT BILIRUBIN TOTAL/DIR
<input type="checkbox"/> Cooper, Jason D.			2007 03/22 10:30 AM	Transcription (St Vincent)	Hospital Procedure Note
<input type="checkbox"/> Cooper, Jason D.			2006 12/27 04:10 PM	Radiology (St Vincents)	CT LUMBAR SPINE WO/C
<input type="checkbox"/> Cooper, Jason D.			2007 03/21 05:40 PM	Radiology (St Vincents)	LIMITED ABDOMEN ULS
<input type="checkbox"/> Cooper, Jason D.			2007 02/21 10:50 PM	Lab (St Vincents)	T4
<input type="checkbox"/> Cooper, Jason D.			2006 11/30 04:50 PM	Transcription (Clarian)	Operative Note (UPDATE ver. 2)
<input type="checkbox"/> Cooper, Jason D.			2007 02/14 02:00 PM	Transcription (St Vincent)	Hospital Procedure Note
<input type="checkbox"/> Frankenfield, Robert S.			2006 12/15 07:40 AM	Lab (Community East)	LDH
<input type="checkbox"/> Frankenfield, Robert S.			2006 12/15 08:21 AM	Lab (Community East)	D-DIMER
<input type="checkbox"/> Frankenfield, Robert S.			2006 12/15 09:20 AM	Radiology (Community East)	CT-ABDOMEN AND PELVIS WITH CONTRAST
<input type="checkbox"/> Frankenfield, Robert S.			2006 12/15 10:40 AM	Lab (Community East)	THROM CLOT TIME
<input type="checkbox"/> Frankenfield, Robert S.			2006 12/15 11:10 AM	Lab (Community East)	ANTITHROMBIN III
<input type="checkbox"/> Frankenfield, Robert S.			2006 12/15 02:20 PM	Lab (Community East)	STAT CBC,ORDERED W/DIFF
<input type="checkbox"/> Frankenfield, Robert S.			2006 12/15 03:00 PM	Lab (Community East)	INTERPRETATION
<input type="checkbox"/> Frankenfield, Robert S.			2006 12/15 03:30 PM	Lab (Community East)	STAT DIFFERENTIAL
<input type="checkbox"/> Zlatnisko, Neil A.			2007 02/22 05:40 PM	Radiology (Clarian)	NM GI Hepatobiliary Scan Incl. Gallbladder w/w/o Pharm. Intrvntn.

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#2 Gross, Betsy  
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INBOX Review

Navigation: Previous Find Inbox

Actions: Mark As Seen Print Forward

Copy for: Bajuyo, Maria A.

Pt:



Beech Grove Indianapolis Mooresville

St. Francis Beech Grove  
 1600 Albany St.  
 Beech Grove, IN 46107

Pt: MRF: DOB: Sex:  
 Acct: SSN: Home: Work:  
 Ordered by: Primary Care:

Date: Accession: Location: BGPD  
 Ordered by: BAJUYO, MARIA A

\*\*\* Basic Metabolic Panel \*\*\*

Procedure	Value	Flag	Units	Ref Range
Glucose	87		mg/dL	70-100
Fasting status of outpatients available upon request.				
BUN	11		mg/dL	7-17
Creatinine	0.8		mg/dL	0.7-1.2
Sodium	136	L	meq/L	137-145
Potassium	4.2		meq/L	3.6-5.0
Chloride	102		meq/L	98-107
Carbon Dioxide	23.0		meq/L	22.0-30.0
Calcium	9.5		mg/dL	8.4-10.2

Lab performed at Beech Grove Caspus: 1600 Albany St., Beech Grove, IN 46107

# DOCS4DOCS® Service Statistics

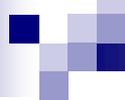
- 6,300

- 2,200

- ~38,000

“While many major metropolitan areas have similar systems, (IHIE’s) was one of the first and is viewed by many as one of the best...”

– Indianapolis Star, June 2007



# DOCS4DOCS Service Savings

- ≈\$7 Million



INPC

# Abstract Example

**Clinical Abstract**

Patient: DOE, JANE    #: 7777777    Doctor: DOE, JOHN    Sex: F    DOB: 01Jan30

## ENCOUNTERS

Encounters	Encounter Site	Date	Physician
Output	MMG GREEN MED	01Apr07	DOE, JOHN (c)
ER	ST FRANCIS S ER	01Jan07	PHYSICIAN (b)
Unknown		01Jan07 - 01Jan07	PHYSICIAN, ER (b)
Output		01Jan07 - 01Jan07	DOE, JOHN (a)

## CHRONOLOGIC RESULTS

<b>Tropoin I</b>	01Jan07
Tropoin I SerPl Qn	0.02 ng/mL 01Jan07 (f)
Note: Cutoff for AMI is 0.5 ng/mL 0.05-0.49 ng/mL: Indeterminate range. AMI can not be ruled out. Please correlate clinically.	
<b>CK MB</b>	01Jan07
CK-MB BldSerPl Qn (Rapid)	3.0 ng/mL 01Jan07 (f)
<b>Est GFR</b>	01Jan07
GFR Est MDRD Non Afric American	86 mL/min/1.50m2 01Jan07 (f)
This calculation assumes the patient is not African American. If the patient is African American, multiple the result by 1.210. Chronic kidney disease indicated by GFR less than 60 mL/min/1.73m2. Kidney failure indicated by GFR less than 15 mL/min/1.73m2. This estimate should be used for screening purposes only. A creatinine clearance should be obtained for use in adjusting medication dosages or when choosing potentially nephrotoxic medications.	
<b>Chest Unspecified XR</b>	01Jan07
Chest Unspecified XR	01Jan07 (g)
<b>Complete Blood Count</b>	01Jan07
RDW	15.0 % 01Jan07 (f)
Neutrophils %	50*L % 01Jan07 (f)
Platelet #	340 x10E3/uL 01Jan07 (f)
Lymphocytes %	40 % 01Jan07 (f)
Monocytes %	10 % 01Jan07 (f)
Eosinophils %	4 % 01Jan07 (f)
Basophils %	1 % 01Jan07 (f)
Hgb	12.0 g/dl 01Jan07 (f)
Hct	35.0*L % 01Jan07 (f)
WBC #	6.00 x10E3/uL 01Jan07 (f)
RBC #	4.00*L x10E6/uL 01Jan07 (f)
MCV	87.0 fL 01Jan07 (f)
MCH	29.0 pg 01Jan07 (f)
MCHC	34.0 g/dL 01Jan07 (f)
<b>Tropoin I</b>	01Jan07
Tropoin I SerPl Qn	0.02 ng/mL 01Jan07 (f)
Note: Cutoff for AMI is 0.5 ng/mL 0.05-0.49 ng/mL: Indeterminate range. AMI can not be ruled out. Please correlate clinically.	
<b>Basic Metabolic Panel</b>	01Jan07
Glucose SerPl Qn	100*H mg/dL 01Jan07 (f)
Fasting status of outpatients available upon request.	
BUN SerPl Qn	10 mg/dL 01Jan07 (f)
Creatinine SerPl Qn	0.9 mg/dL 01Jan07 (f)
Calcium SerPl Qn	10.0 mg/dL 01Jan07 (f)
Sodium SerPl Qn	140 meq/L 01Jan07 (f)
Potassium SerPl Qn	4.0 meq/L 01Jan07 (f)
Chloride SerPl Qn	100 meq/L 01Jan07 (f)
CO2-Tot SerPl Qn	25.0 meq/L 01Jan07 (f)
<b>CKMB</b>	01Jan07
CK-MB BldSerPl Qn (Rapid)	3.0 ng/mL 01Jan07 (f)
<b>Encounter Site</b>	01Jan07
Encounter Site	ST FRANCIS S ER 01Jan07 (b)
<b>E.R. Chief Complaint</b>	01Jan07
E.R. Chief Complaint	CP 01Jan07 (i)
<b>EKG</b>	01Jan07
QT Interval	320 ms 01Jan07 (h)
PR Interval	150 ms 01Jan07 (h)
QRS Interval	70 ms 01Jan07 (h)
QT Corrected	440 ms 01Jan07 (h)
<b>IMPRESSION</b>	01Jan07 (h)
*** Poor data quality, interpretation may be adversely affected	
Sinus tachycardia	
probable Anterior infarct, age undetermined	
Abnormal ECG	
SUGGEST REPEAT TRACING	
ECG done at South Campus ED	
Confirmed by DOE MD, JACK (5555), editor DOE, JESSICA (4444) on 01-Jan-2007	
12:00:00	
Ventricular Rate	100 BPM 01Jan07 (h)
Atrial Rate	100 BPM 01Jan07 (h)
R-Wave Axis	-10 degrees 01Jan07 (h)
P-Wave Axis	60 degrees 01Jan07 (h)
T-Wave Axis	80 degrees 01Jan07 (h)
<b>HOSP ABSTRACT</b>	15Dec06
Hosp Stay	DISCH 15Dec06 (a)

## CHRONOLOGIC RESULTS

<b>Hosp ICD9 Dx</b>	15Dec06
Hosp ICD9 Dx	BENIGN HYPERTENSION 15Dec06 (d)
<b>LIPID PROFILE</b>	15Dec06
Cholesterol/HDL SerPl Qn	4 15Dec06 (e)
Triglyceride SerPl Qn	205*H mg/dL 15Dec06 (e)
Cholesterol SerPl Qn	220*H mg/dL 15Dec06 (e)
HDL Cholest SerPl Qn	60 mg/dL 15Dec06 (e)
LDL SerPl Calc Qn	110*H mg/dL 15Dec06 (e)
<b>AUTOMATED DIFFERENTIAL</b>	15Dec06
Source	auto count 15Dec06 (e)
Neutrophils #	5.0 k/cumm 15Dec06 (e)
Neutrophils %	60 % 15Dec06 (e)
Basophils #	0.4 k/cumm 15Dec06 (e)
Eosinophils #	0.4 k/cumm 15Dec06 (e)
Monocytes #	0.4 k/cumm 15Dec06 (e)
Lymphocytes #	1.5 k/cumm 15Dec06 (e)
Lymphocytes %	20 % 15Dec06 (e)
Monocytes %	15 % 15Dec06 (e)
Eosinophils %	3 % 15Dec06 (e)
Basophils %	3 % 15Dec06 (e)
<b>TSH SerPl Qn 3RD Gen</b>	15Dec06
TSH SerPl Qn 3RD Gen	1.500 mcU/mL 15Dec06 (e)
<b>HEMOGRAM</b>	15Dec06
MPV	7.0 fL 15Dec06 (e)
RDW	13.5 % 15Dec06 (e)
Platelet #	320 k/cumm 15Dec06 (e)
Hgb	13.0 GM/dL 15Dec06 (e)
Hct	39.0 % 15Dec06 (e)
WBC #	8.5 k/cumm 15Dec06 (e)
RBC #	4.00 million/cumm 15Dec06 (e)
MCV	90 fL 15Dec06 (e)
MCH	31.0 pg 15Dec06 (e)
MCHC	33.0 GM/dL 15Dec06 (e)
<b>BASIC METABOLIC</b>	15Dec06
Anion Gap 3	15 mmol/L 15Dec06 (e)
Glucose SerPl Qn	90 mg/dL 15Dec06 (e)
This is the reference range for a fasting glucose.	
BUN SerPl Qn	19 mg/dL 15Dec06 (e)
Creatinine SerPl Qn	0.5 mg/dL 15Dec06 (e)
GFR Calculated MDRD	96*H mL/min/1.73m2 15Dec06 (e)
Calcium SerPl Qn	9.0 mg/dL 15Dec06 (e)
Sodium SerPl Qn	136 mmol/L 15Dec06 (e)
Potassium SerPl Qn	4.5 mmol/L 15Dec06 (e)
Chloride SerPl Qn	95 mmol/L 15Dec06 (e)
CO2-Tot SerPl Qn	25 mmol/L 15Dec06 (e)
<b>HOSP ABSTRACT</b>	15Dec06
Hosp Facility	BW 15Dec06 (a)
Hosp Location	SOUTH 15Dec06 (a)
Attending MD	DOE, JOHN 15Dec06 (a)
Admitting MD	DOE, JOHN 15Dec06 (a)
Hosp Service	XSO 15Dec06 (a)
<b>Admitting ICD9 Dx</b>	15Dec06
Admitting ICD9 Dx	BENIGN HYPERTENSION 15Dec06 (a)
	ACQUIRED HYPOTHYROID NEC

# Results Review Example

- Active Labs
- Flowsheet**
- Clinical Synopsis
- REPORTS
  - ALL REPORTS
  - Admission/Discharge
  - Cardiology
  - Operative
  - Pathology
  - Radiology
  - Visit/Procedure Notes
  - Nurse/PA/PT/OT/Diet
  - Cytology
  - GI Procedures
- Face Sheet
- Appointment History
- Orders
- ENCOUNTERS
  - Brief
  - Detailed
- PRESCRIPTIONS
  - Inpatient
  - Outpatient
  - Surgery Log

ACA TESTS	22-Dec-90 06:00	21-Dec-90 06:00	20-Dec-90 06:00	07-Jun-90 07:31	21-Sep-88 21:08	03-Feb-88 16:49	18-Sep-87 16:22	16-Nov-86 06:00	15-Nov-86 06:00	13-Nov-86 20:40	Units
<input type="checkbox"/> Sgot'								42°H {} ?	42°H {} ?	43°H {} ?	UNITS/L
<input type="checkbox"/> Lactate					0.2°L {} ?		0.4°L {} ?				mmol/L
<input type="checkbox"/> Ggtp	190°H {} ?		331°H {} ?	254°H {} ?							UNITS/L
<input type="checkbox"/> Lipase"						7 {} ?				8 {} ?	UNITS/L
<input type="checkbox"/> Aca panel 1		Cancelled by Ward {} ?									

{ } - From WISHARD, 0879309-3

BILIRUBINS-FX	19-Jul-99 04:20	28-Jun-95 06:08	03-Jun-95 14:29	09-Oct-90 08:01	11-Feb-90 09:38	07-Jun-88 22:03	18-Sep-87 13:02	15-Jul-87 06:00	04-Dec-86 06:00	16-Nov-86 06:00	15-Nov-86 06:00	13-Nov-86 20:40	Units
<input type="checkbox"/> Bili-tot	1.5°H {} m ?	1.8°H {} n ?	1.2 {} n ?	1.9°H {} o ?	1.2 {} o ?	2.6°H {} o ?	3.4°H {} o ?	3.2°H {} o ?	1.9°H {} o ?	1.6°H {} o ?	1.6°H {} o ?	2.0°H {} o ?	mg/dL
<input type="checkbox"/> Bili dir'		0.5°H {} n ?	0.3 {} n ?	1.1°H {} o ?	0.7°H {} o ?	1.3°H {} o ?	1.4°H {} o ?	1.2°H {} o ?	0.7°H {} o ?	0.4 {} o ?	0.6°H {} o ?	0.5°H {} o ?	mg/dL
<input type="checkbox"/> Bili indir				0.8 {} o ?	0.5 {} o ?	1.3°H {} o ?	2.0°H {} o ?	2.0°H {} o ?	1.2°H {} o ?	1.2°H {} o ?	1.0°H {} o ?	1.5°H {} o ?	mg/dL

{m} - From Methodist Lab (SQLAB), 7130/REGEN/0/IDES/load/top.subdoc  
 {n} - From Methodist Archive Lab, 7130/REGEN/0/IDES/load/top.subdoc  
 {o} - From WISHARD, 0879309-3

SMA12'	16-Aug-87 06:00	15-Aug-87 18:58	14-Jul-87 17:13	24-Mar-87 06:00	10-Mar-87 16:02	18-Dec-86 06:29	30-Nov-86 14:43	27-Oct-86 06:00	Units
<input type="checkbox"/> Albumin (sma)	3.2°L {} p ?	3.6°L {} p ?	3.4°L {} p ?	3.1°L {} p ?	4.2 {} p ?	3.4°L {} p ?	3.8 {} p ?	3.9 {} p ?	g/dL
<input type="checkbox"/> Alk phos (sma)	169°H {} p ?	205°H {} p ?	212°H {} p ?	324°H {} p ?	143°H {} p ?	145°H {} p ?	123 {} p ?	122 {} p ?	UNITS/L
<input type="checkbox"/> Bun (sma)	3°L {} p ?	2°L {} p ?	5°L {} p ?	3°L {} p ?	6°L {} p ?	2°L {} p ?	2°L {} p ?	6°L {} p ?	mg/dL
<input type="checkbox"/> Calcium (sma)	8.3°L {} p ?	8.7 {} p ?	8.4 {} p ?	8.7 {} p ?	9.1 {} p ?	8.7 {} p ?	9.2 {} p ?	8.9 {} p ?	mg/dL
<input type="checkbox"/> Chol (sma)	85°L {} p ?	88°L {} p ?	107°L {} p ?	100°L {} p ?	109°L {} p ?	104°L {} p ?	104°L {} p ?	94°L {} p ?	mg/dL
<input type="checkbox"/> Creat (sma)	0.5 {} p ?	0.4 {} p ?	0.6 {} p ?	0.5 {} p ?	0.4 {} p ?	0.4 {} p ?	0.3°L {} p ?	0.5 {} p ?	mg/dL

Help Logout Cancel OK



SELLA TURCICA MRI  
MRI SELLA-PITUITARY  
W/CONTRAST  
11-May-00 08:02 AM

Step Size: 1  
Series: 4 Image: 8 Of 19

Zoom: 1/4 Full 4x

Window Level Controls:  
W: 0 L: 0 apply  
or pick preset: Uniform

- Select series:
- (1)[15] T1; Spin Echo; SAG T1
  - (2)[15] T1; Spin Echo; COR T1
  - (3)[15] T1; Spin Echo; COR T1
  - (4)[19] Series 4; Spin Echo; A
  - (5)[19] Series 5; Research M
  - (6)[16] T1; Spin Echo; SAG LC

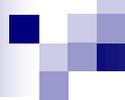


Contact Sheets for T1; Spin Echo; COR T1 ScanSequence: SE ScanOptions: GRAPH\_GEMS\NPW\CS\_GEMS\ASP [15] leveled for MRA



# Size

- $\approx 12$  million
- 1.5 billion
- $> 35$  years



# Results Review Service Savings

- ≈\$5 million annually

# Public Health Emergency Surveillance System (PHESS)



Indiana State  
Department of Health

# Reportable disease example

FRIDAY, APRIL 14, 2000

**WARMER**  
Low 45, high 73. Page B8 

**SPORTS**  
**COLTS SEARCHING FOR TALENT**  
Team not looking for specific roles. Page D1

**NATION**  
**BUSH, GAY REPUBLICANS MEET**  
Conservatives criticize gathering. Page A9

**EXTRA!**  
**THE DECORATING WARS**  
How to furniture shop in harmony. Page E1

## THE INDIANAPOLIS STAR

ITY FINAL "Where the Spirit of the Lord is, there is Liberty" II Cor. 3:17 NEWSSTAND PRICE 50¢

### President says he won't seek a pardon

Clinton acknowledges personal mistake but

### What is shigellosis?

Shigellosis is a serious gastrointestinal illness that occurs about two days to one week after a person becomes infected with shigella bacteria. The infection is easily passed from one person to another. Some people may have no symptoms but still spread the infection. The symptoms are:

- Diarrhea.
- Sudden stomach pain.
- Stomach cramps.
- Fever.
- Vomiting.
- Blood, pus and mucus in stool.

### 76 ill from outbreak at child-care sites

■ Cases aren't limited to one geographical area, and the 14 centers are cleaning and cooperating.

**By Kathleen Schuckel**  
STAFF WRITER

A major outbreak of shigellosis — a serious gastrointestinal illness that mostly strikes preschoolers — has been reported at 14 Indianapolis child-care centers and ministries, according to the Marion County Health Department.

From January to the present, the health department had 76 confirmed cases of shigellosis. That compares to only one case in the first four months of 1999, officials said.

The germs typically are spread from hand to mouth and are contained in fecal material.

"It takes only a very little bit of material to be infected, but the germs must be ingested. They're not spread via skin, and it's not airborne," said Ann Johnson, coordinator of communicable disease epidemiology for the Marion County Health Department. "This little bacteria is pretty potent."

The infection is best prevented by thorough washing after using the bathroom or changing a diaper.

"It spreads very quickly if you do not wash your hands," Johnson said.

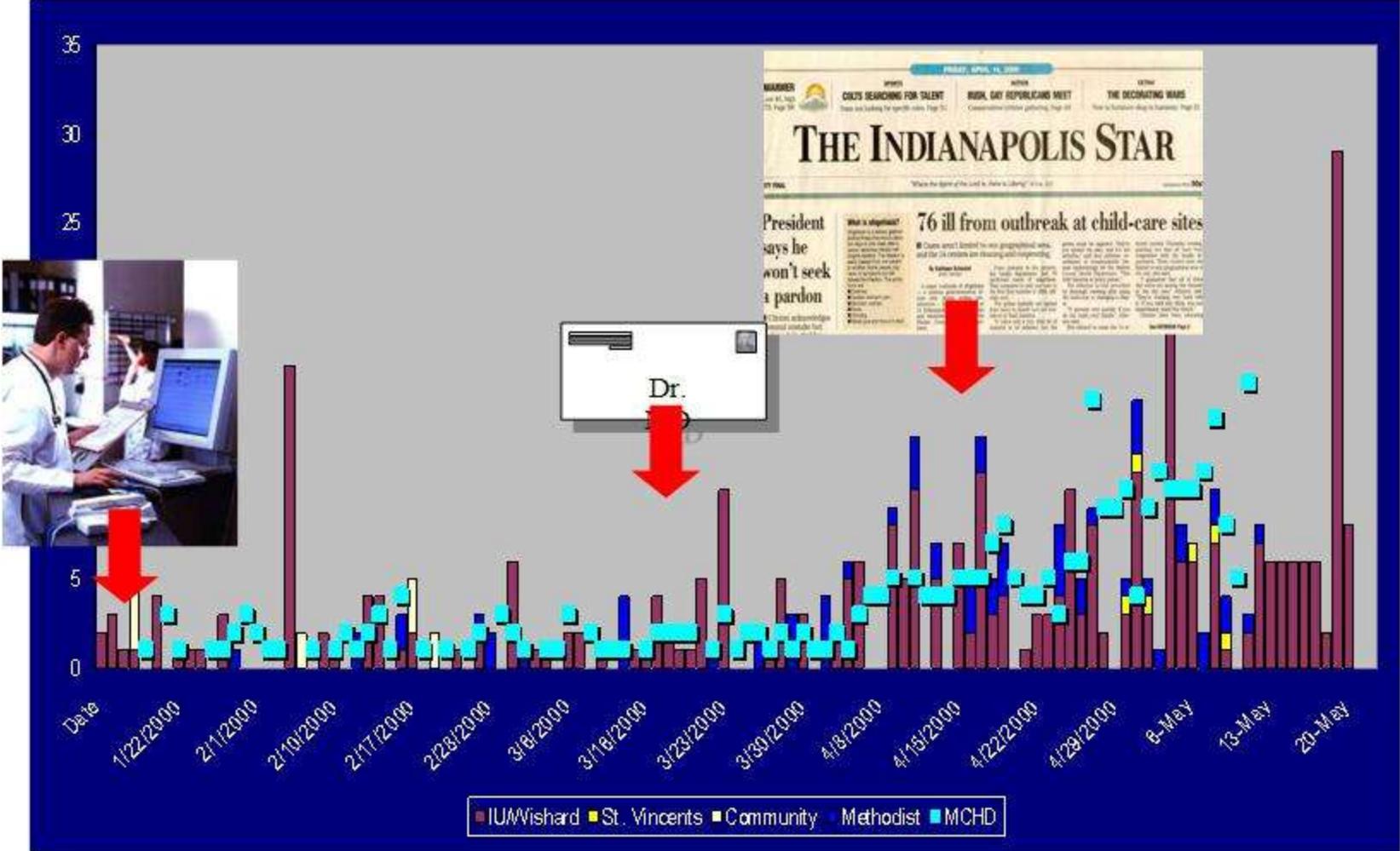
She refused to name the 14 affected centers Thursday evening, pointing out that all have been cooperative with the health department. These centers were not limited to any geographical area of the city, she said.

"I guarantee that all of these day cares are among the cleanest in the city now," Johnson said. "They're working very hard with it. If you walk into them, you can immediately smell the bleach."

Centers have been educating

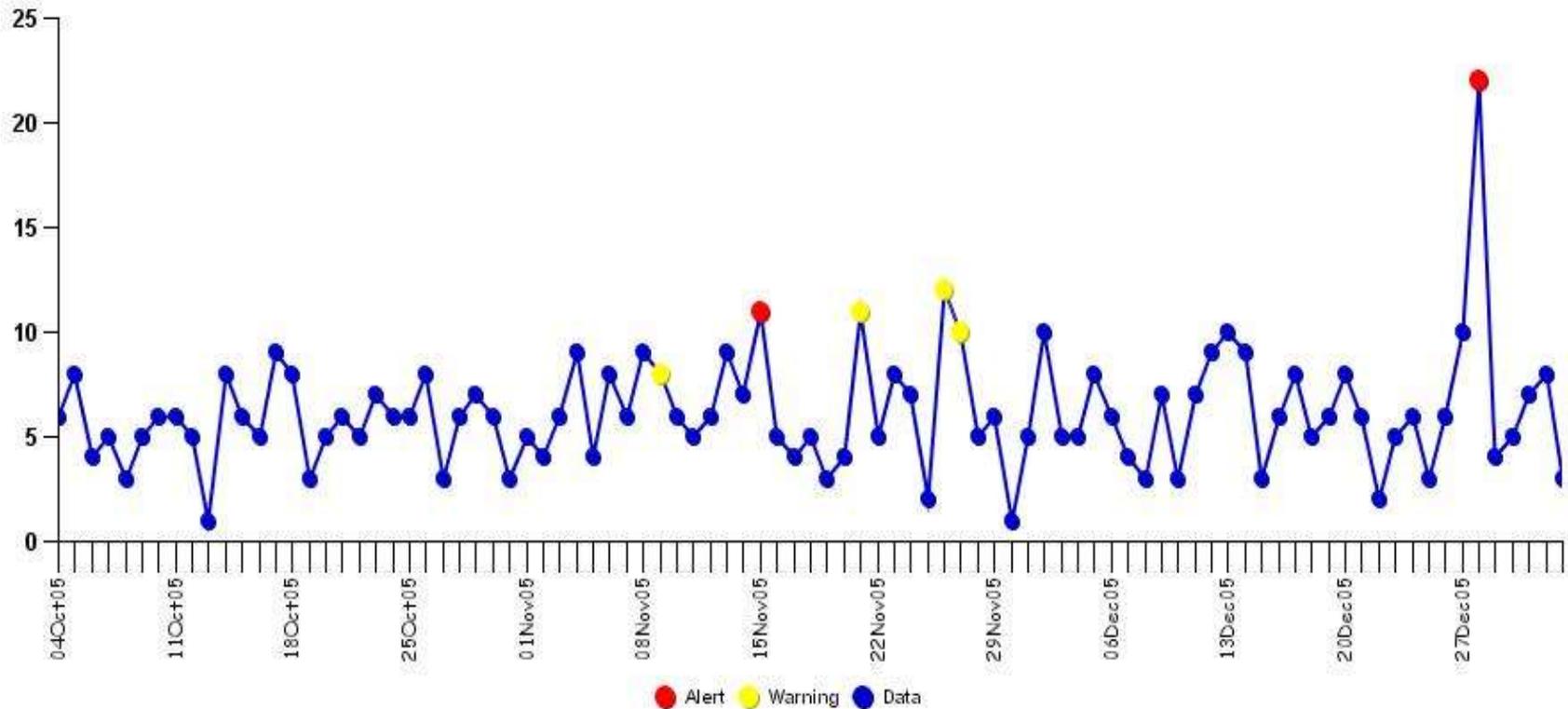
See **OUTBREAK** Page 2

# Shigella Outbreak: Timeline



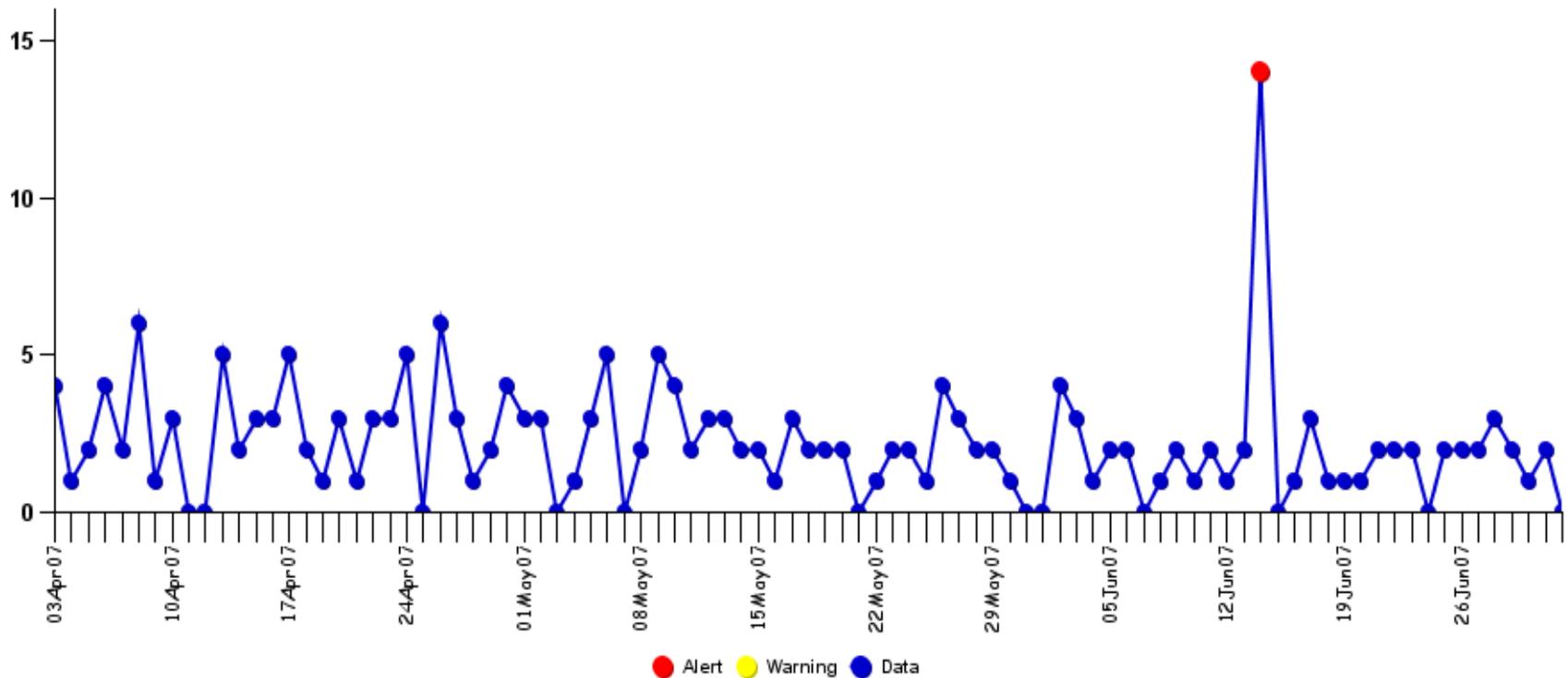
# GI Symptoms

Daily Data Counts



# Respiratory Symptoms

Daily Data Counts



# Sample e-mail notification

File Edit View Go Message Calendar Tools Help

Get Mail Write Address Book Reply Reply All Forward Tag Delete Junk Print Back Forward

inpc

Subject	Sender	Size	Date
Re: Evansville Deaconess and INPC	Corley, Bill	3KB	11/27/2007 5:47 PM
INPC file transfer to MCHD completed successfully!	INPC	3KB	11/27/2007 1:59 PM
INPC file transfer to ISDH completed successfully!	INPC	3KB	11/27/2007 7:20 AM
<b>FW: Recent INPC meeting</b>	<b>John Kansky</b>	<b>46KB</b>	<b>11/26/2007 4:33 PM</b>
INPC file transfer to MCHD completed successfully!	INPC	3KB	11/26/2007 12:55 PM

**Subject: INPC file transfer to MCHD completed successfully!**  
**From:** [INPC <inpc@regenstrief.org>](mailto:inpc@regenstrief.org)  
**Reply-To:** [inpc@regenstrief.org](mailto:inpc@regenstrief.org)  
**Date:** 11/27/2007 1:59 PM  
**To:** [INPC <inpc@regenstrief.org>](mailto:inpc@regenstrief.org)

=====  
 INPC - Indiana Network for Patient Care  
 =====  
 Public Health Electronic Reporting Summary

The following table summarizes the data that has been added to the database in the past 3 days.

11/27/07	11/26/07	11/25/07	11/24/07	
12:00 AM	12:00 AM	12:00 AM	12:00 AM	
TO	TO	TO	TO	
06:00 AM	11:59 PM	11:59 PM	11:59 PM	
Cases	Cases	Cases	Cases	Condition
-----				
ANTIBIOTIC:				
0	4	8	4	Enterococcus, Vancomycin-resistant
0	13	2	7	Staphylococcus, Methicillin-resistant
ENTERIC:				
0	7	1	0	Hepatitis A
0	2	1	1	Shigellosis
HEPATITIS B:				
11	6	3	1	Hepatitis B
HEPATITIS C:				
0	11	3	2	Hepatitis C
HIV:				
0	2	1	10	Human immunodeficiency virus
INVASIVE:				
0	8	10	11	Streptococcus, Group A
0	0	0	1	Streptococcus, Group B
LEAD:				
0	19	9	2	Lead exposure
POISONINGS:				



**Subject:** CDC Health Alert - Multiple States Investigating a Large Outbreak of E. coli O157:H7 Infections  
**From:** CDC Clinician Registry <clinicianOutreachcom@CDC.GOV>  
**Sender:** CDC's Clinician's Terrorism Update Listserv <CDC-CLINICIANERRORISMANDEMERGRESUPDATES@LISTSERV.CDC.GOV>  
**Reply-To:** clinicianoutreachcom@CDC.GOV  
**Date:** 9/15/2006 8:36 AM  
**To:** CDC-CLINICIANERRORISMANDEMERGRESUPDATES@LISTSERV.CDC.GOV



September 15, 2006

This is an official CDC Health Alert distributed via the Health Alert Network (HAN) on September 14, 2006, 23:00 EDT (11:00 PM EDT).

## CDC Health Alert

### Multiple States Investigating a Large Outbreak of E. coli O157:H7 Infections

Public health officials in multiple states, with the assistance of the Centers for Disease Control and Prevention, are investigating a large outbreak of E. coli O157:H7 infections. Thus far, 50 cases with isolates demonstrating pulsed-field gel electrophoresis (PFGE) CDC PulseNet pattern number EXHX01.0124, as determined by Xba restriction enzyme DNA digestion, have been reported from CT (1), ID (3), IN (4), MI (3), OR (5), NM (2), UT (1), WI (20). Eight patients developed the hemolytic uremic syndrome (HUS) and one patient died. Most cases are recent: for those with known illness onset, the range of onset is 08/25/2006 to 09/03/2006. The outbreak is likely ongoing.

Preliminary findings from case interviews indicate that pre-packaged spinach is the most likely source. Additional investigation is necessary to determine the brand or brands of pre-packaged spinach involved. State and CDC investigators are working with FDA to quickly gather information to take action to protect the public. The FDA advises that consumers not eat bagged fresh spinach at this time.

The E. coli O157:H7 bacterium causes diarrhea that is often bloody and accompanied by abdominal cramps, but fever is absent or mild. The illness typically resolves within a week. However, some people, especially young children and the elderly, develop the hemolytic uremic syndrome, or HUS.

For more information concerning E. coli O157 infection, please see the CDC internet website: [http://www.cdc.gov/ncidod/diseases/submenus/sub\\_ecoli.htm](http://www.cdc.gov/ncidod/diseases/submenus/sub_ecoli.htm).

E. coli O157:H7 cases should be reported rapidly to the appropriate local and state public health officials, and isolates should be forwarded to state public health laboratories for rapid PFGE analysis. We request state officials report cases demonstrating the outbreak PFGE pattern to the Enteric Diseases Epidemiology Branch (Thai-An Nauven (ten9@cdc.gov 404-639-0776)

Subject: INPC file transfer to MCHD completed successfully!  
 Date: Tue, 15 Aug 2006 19:57:28 -0400  
 From: INPC <[inpc@regenstrief.org](mailto:inpc@regenstrief.org)>  
 Reply-To: <[inpc@regenstrief.org](mailto:inpc@regenstrief.org)>  
 To: INPC <[inpc@regenstrief.org](mailto:inpc@regenstrief.org)>

=====  
 INPC - Indiana Network for Patient Care  
 =====  
 Public Health Electronic Reporting Summary

The following table summarizes the data that has been added to the database in the past 3 days.

08/15/06	08/14/06	08/13/06	08/12/06	
12:00 AM	12:00 AM	12:00 AM	12:00 AM	
TO	TO	TO	TO	
04:00 PM	11:59 PM	11:59 PM	11:59 PM	
Cases	Cases	Cases	Cases	Condition
-----	-----	-----	-----	-----
<b>ANTIBIOTIC:</b>				
1	0	0	0	Enterococcus, Vancomycin-resistant
3	8	5	9	Staphylococcus, Methicillin-resistant
<b>ENTERIC:</b>				
1	1	0	0	Campylobacteriosis
1	0	0	0	Escherichia coli O157:H7 infection
1	1	0	0	Hepatitis A
1	1	1	0	Salmonellosis, non-typhoid
<b>HEPATITIS B:</b>				
27	14	2	5	Hepatitis B



# Public Health Service Savings

- Priceless!



SM

# Quality Health First

of Indiana

# Quality Health First

## ■ Physicians:

- Combining medical and drug claims data and clinical data to provide physicians with reports, alerts, and reminders to help monitor patients' health and wellness, including the management of common, chronic diseases. The program also includes childhood immunizations and mental health screening and follow-up.

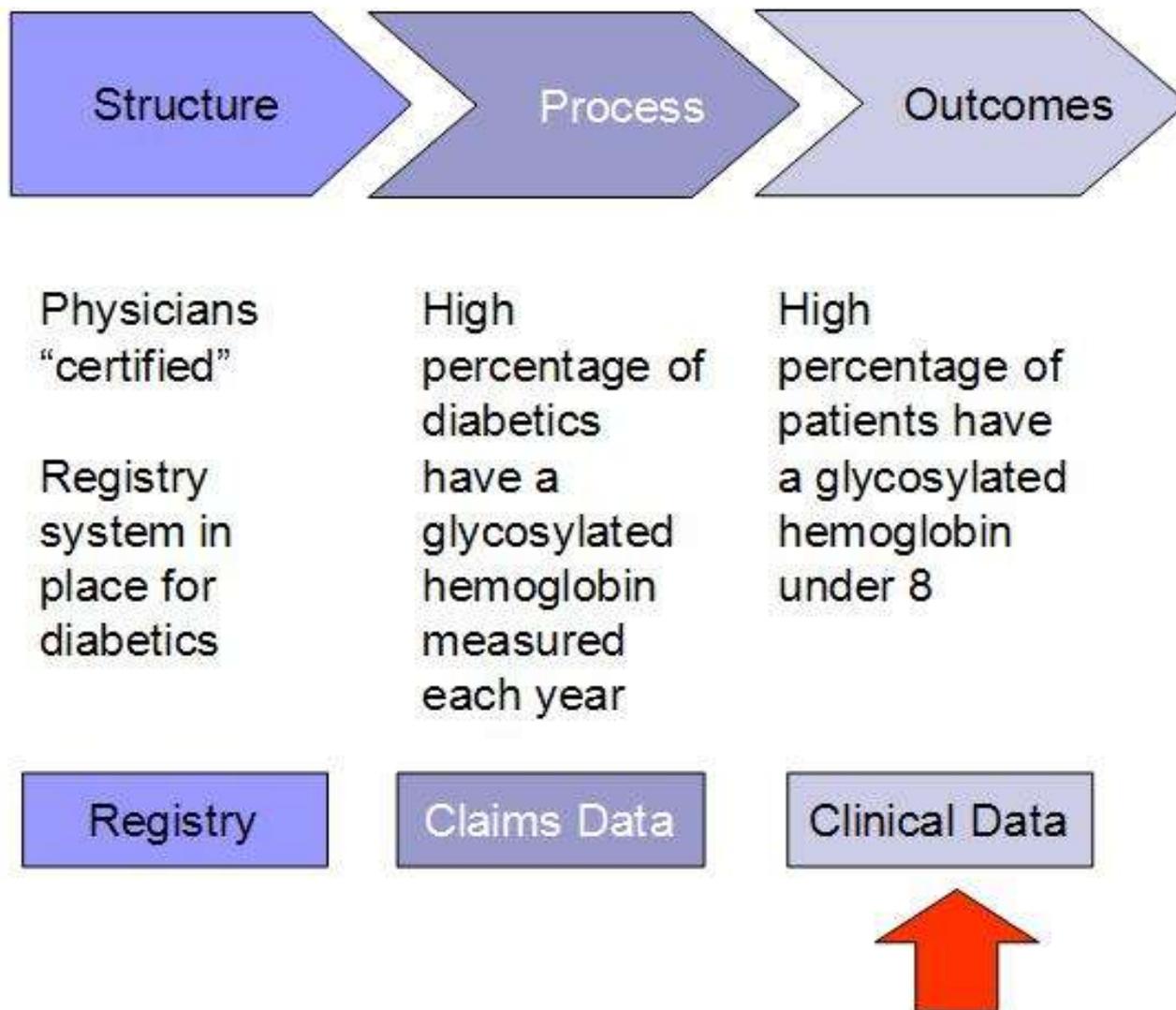
## ■ Health Insurers:

- Participating health insurers will also use these reports to provide meaningful incentives based primarily on the physicians' high performance and significant improvement of the overall health of their patient population.

Programs like Quality Health First "...if done correctly (can) slow that treadmill down and pay more attention to some of the elements of care that are important."  
– Indianapolis Business Journal, January 2007 41

# Focus on Outcomes

Diabetes as an Example

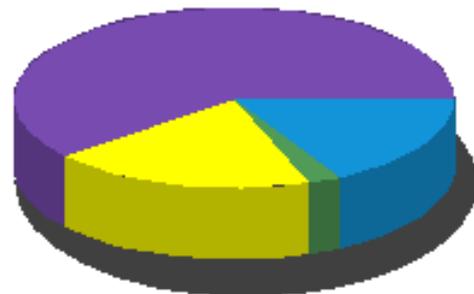


# Quality Health First Example On-line Report

Diabetes Main - Byers, MD, Wendy

Exam / Test	Current Quarter 7/1/2006-9/30/2006	All Diabetic Patients	National Average
Diabetic Eye Exam	78% 	72% 	51%
LDL	94% 	91% 	91%
HbA1c	95% 	84% 	86.5%
Foot Examination	89% 	85% 	
BP Captured	100% 	98% 	
BP Controlled	74% 	76% 	
Nephropathy	52% 	44% 	52%
<b>Total Patients</b>	93	117 	

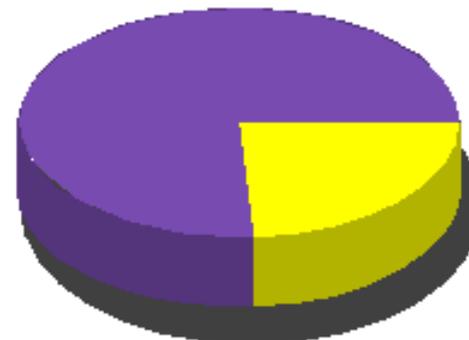
HbA1C Breakdown of Max Values



■ 7.0 under   
 ■ 9.0 up   
 ■ No Value  
■ 7.1-8.9

Criteria

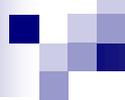
Blood Pressure



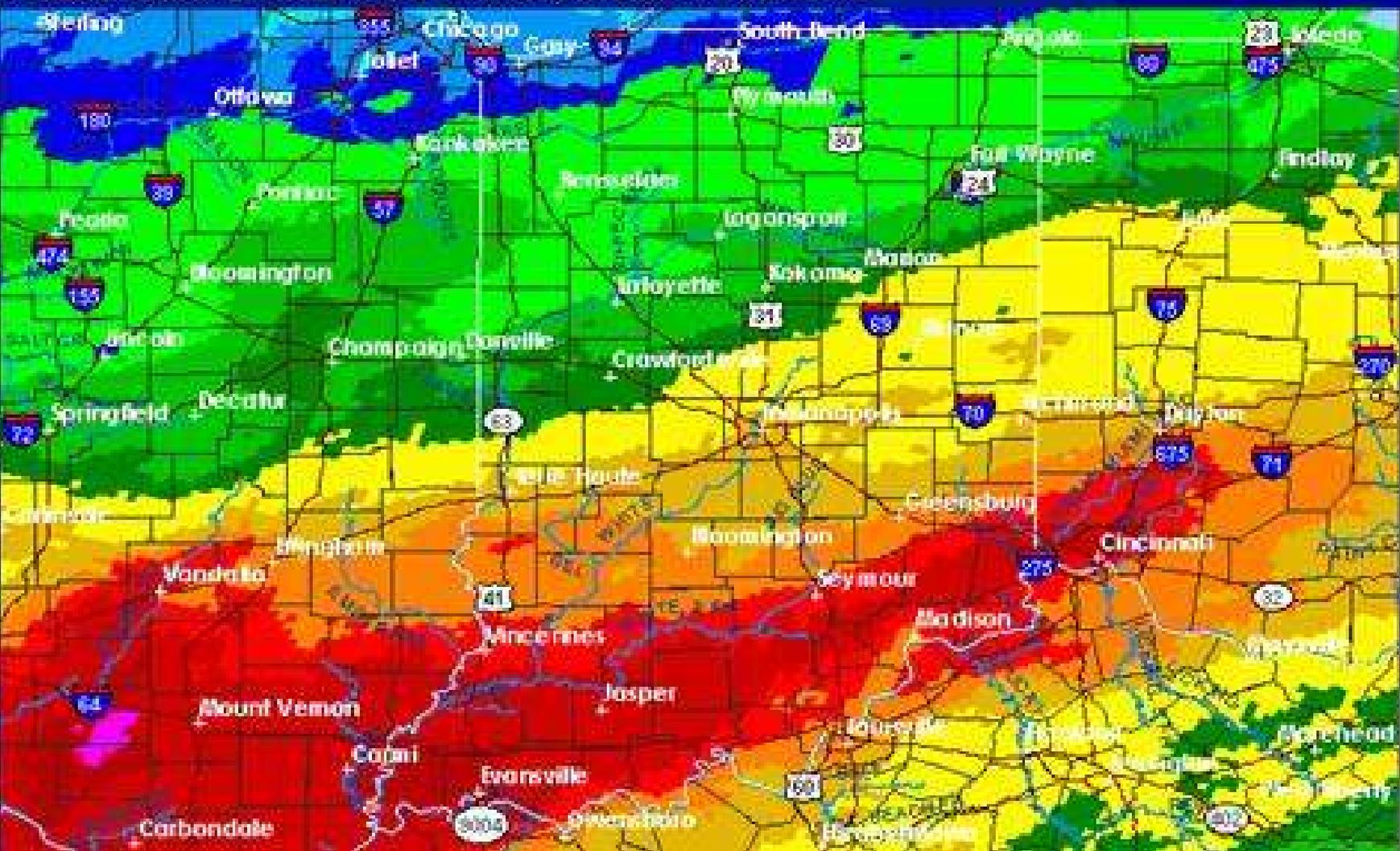
■ In Range   
 ■ Out of Range



# **DISASTER RESPONSE**



# Indiana 7-Day Observed Precipitation - Valid 3/20/2008 1200 UTC





For Women

For Seniors

For Men

For Families

For Employers

Find A Do

Site Search:



- ▶ Home
- ▶ Jobs & Volunteers
- ▶ My Health Page
- ▶ Advanced Technology
- ▶ Quality Results
- ▶ Hospital Services
- ▶ Patient & Visitor Info
- ▶ Events & Wellness Classes
- ▶ Baby Center
- ▶ Foundation
- ▶ Healthy Communities
- ▶ About Us

ONLINE REGISTRATION

PAYMENT OPTIONS

HEALTH INFO

SEND AN E CARD

## Columbus Regional Hospital Flood Recovery Update

Recovery. Imagination. Hope. [more >>](#)

On Saturday, June 7, 2008, Columbus Regional Hospital was severely damaged by record flooding and storms that impacted many areas across Columbus, Indiana. Columbus Regional Hospital and our Emergency Department remain closed.

**In the event of an emergency or a life-threatening situation, please call 911. For non-emergent care, PromptMed located on 25th Street in Columbus is open 24 hours a day / 7 days a week. The Edinburgh PromptMed is open 9 a.m. - 7 p.m. Monday - Friday, and 9 a.m. - 5 p.m. Saturday.**

We thank our community for their support during this time and encourage you to continue to check our web site for updates on our great recovery progress and more information about our services. Patients and the community should call the main hospital number at **812-379-4441** with other questions and information.

Many hospital outpatient services are open at other locations in the community as we work to continue to serve our community. Find a listing of the location of our Outpatient Services through the link below.



## Personal Physicians HealthCare Continuity of Care Document

Created On: 6-, 2008

---

<b>Patient:</b>	MARY DOE 750 WEST STREET INDIANAPOLIS, IN, 46202	<b>MRN:</b> 6230734
<b>Birthdate:</b>	July 10, 1935	<b>Sex:</b> Female
<b>Guardian:</b>		<b>Next of Kin:</b>

---

### Table of Contents

## Problems

- pancreatitis (03/04/1976)
- anemia othr (03/04/1976)
- joint prosthesis (07/28/1980)
- diabetes mellitus (03/04/1976)
- cardiomegaly mod (08/04/1977)
- cellulitis (11/17/1977)
- artificial limb (01/17/1983)
- joint neuropathic (09/06/1977)
- anemia of chronic disease (03/30/1978)
- arthritis other (05/26/1977)
- neuropathy (03/13/1978)
- lues (09/18/1978)
- skin ulcer (12/03/1979)
- CHF? (03/30/1978)
- leg pain (05/05/1980)
- hypertension (03/04/1976)

## Allergies, Adverse Reactions, Alerts

- none (07/12/1982)

## Medications

Medication Code	Medication Name	# of refills	Last Refill Date
00088222507	KETEK PAK	1	09/08/2005
00069306075	ZITHROMAX Z-PAK	2	07/19/2007
00074929613	SYNTHROID	20	05/17/2007
00045152550	LEVAQUIN	1	08/26/2005
00074662413	SYNTHROID	1	05/17/2007
00378181101	LEVOTHYROXINE SODIUM 9		05/16/2007
00378180901	LEVOTHYROXINE SODIUM 1		05/16/2007



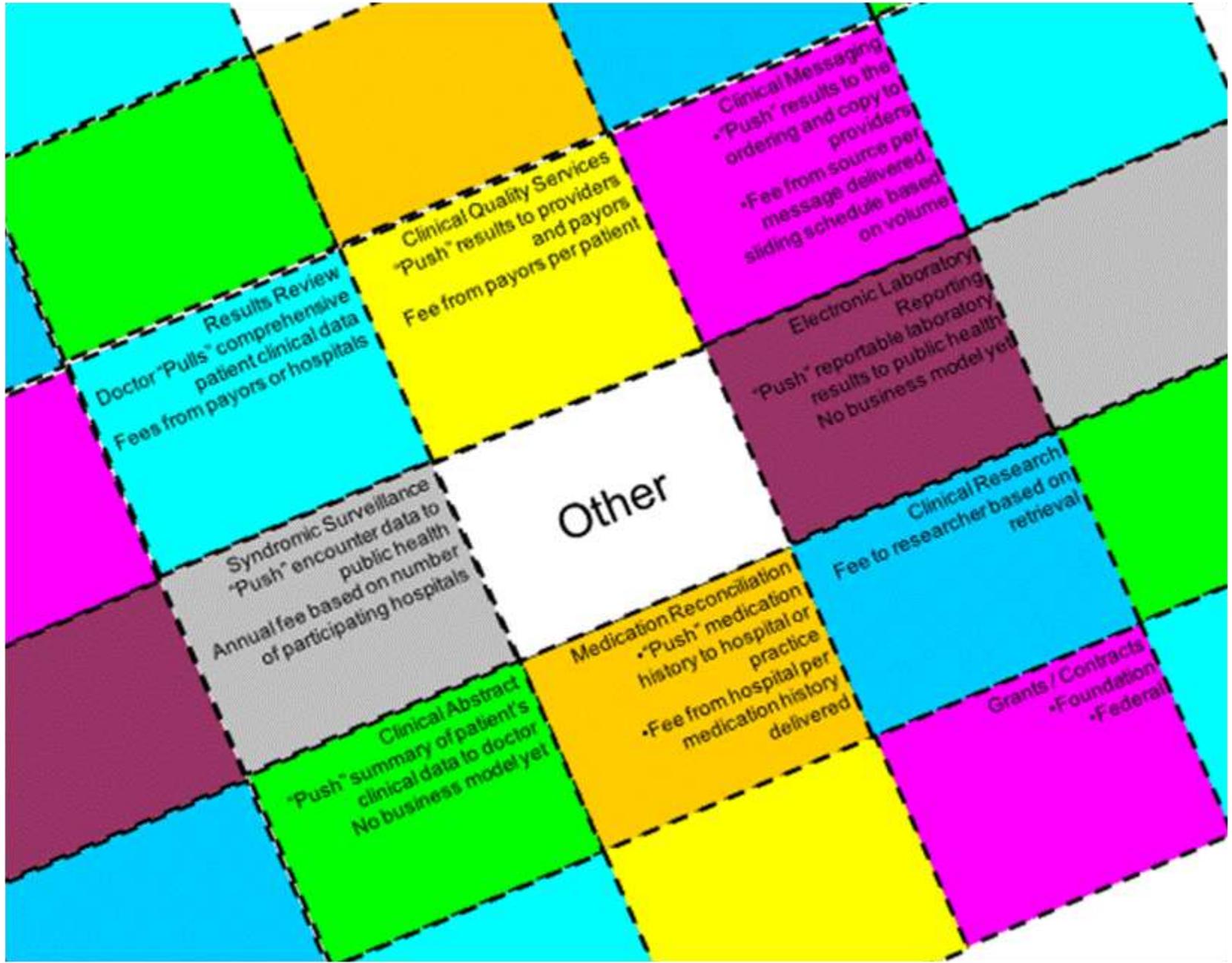
# **SUSTAINABILITY**

# Types of Value

Transactional value: consists of functionality-specific cost savings and revenue gains that accrue to the parties engaging in a health data transaction.

Clinical value: created by medical personnel changing care as a direct result of HIE implementation, and thus achieving better outcomes (whether measured in improved quality, better patient safety, or another measure).

Marketing value: the total effect of increased demand for SNO services leading to either higher volumes or higher prices for the users and suppliers of data as a result of HIE capabilities.





# MERGETICS



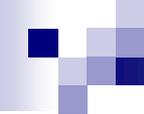
# Health Information Exchange Support Services

- Hosting in state-of-the-art data center
- Connectivity to national and regional data sources (e.g., national laboratories, payors)
- Comprehensive, proven software
- Interface development
- Experienced operations
- End user training and support
- 24x7 help desk
- Proven business models

# Understanding the Value Proposition and Role of Medicaid/SCHIP in Regional Health Information Exchange

Presented by:

Anthony Rodgers, Director, Arizona Health Care Cost  
Containment System



**Presentation will cover two important areas  
regarding Medicaid/SCHIP participation in  
health information exchange**

- Value proposition of health information exchange in Medicaid/SCHIP
- Roles and options for Medicaid participation in health information exchange

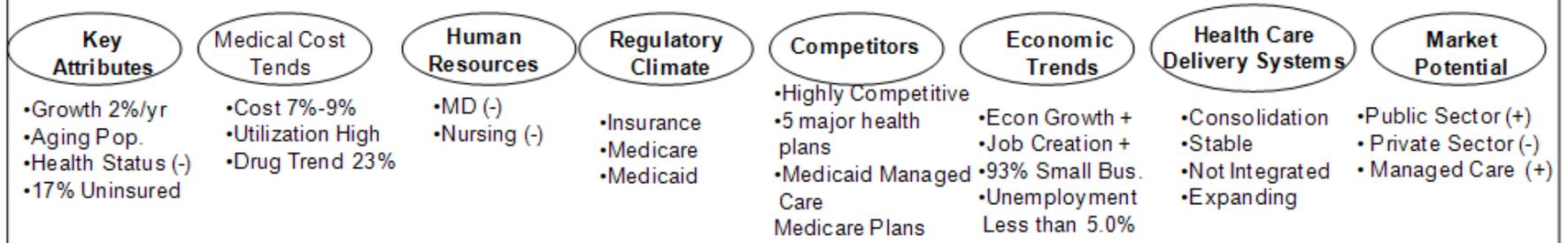


# **The Purpose of Health Information Exchange in Medicaid/SCHIP**

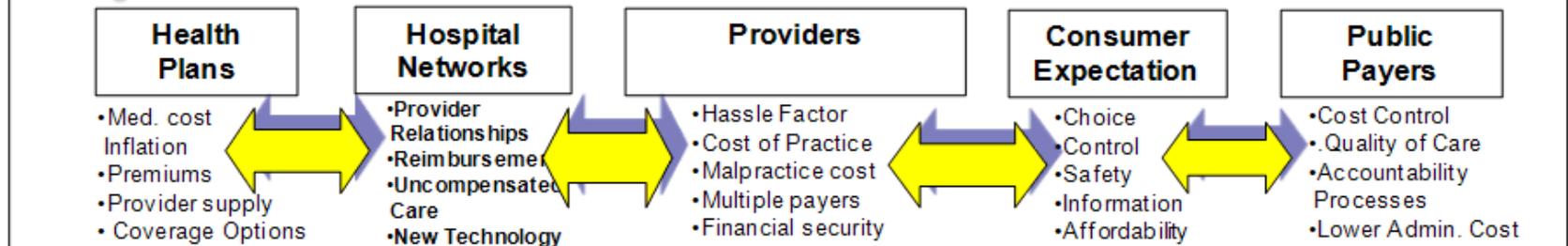
***To improve the Medicaid/SCHIP health care system efficiency, patient care quality and safety, rapid and continuous adoption of clinical best practices, public health protection, and disaster response.***

# Scan of State Health Care Environments

## Environmental Assessment of State Health Care Systems:



## Strategic transformation Issues:



Synergies

State-based Strategic HIT Initiatives:

Private Sector

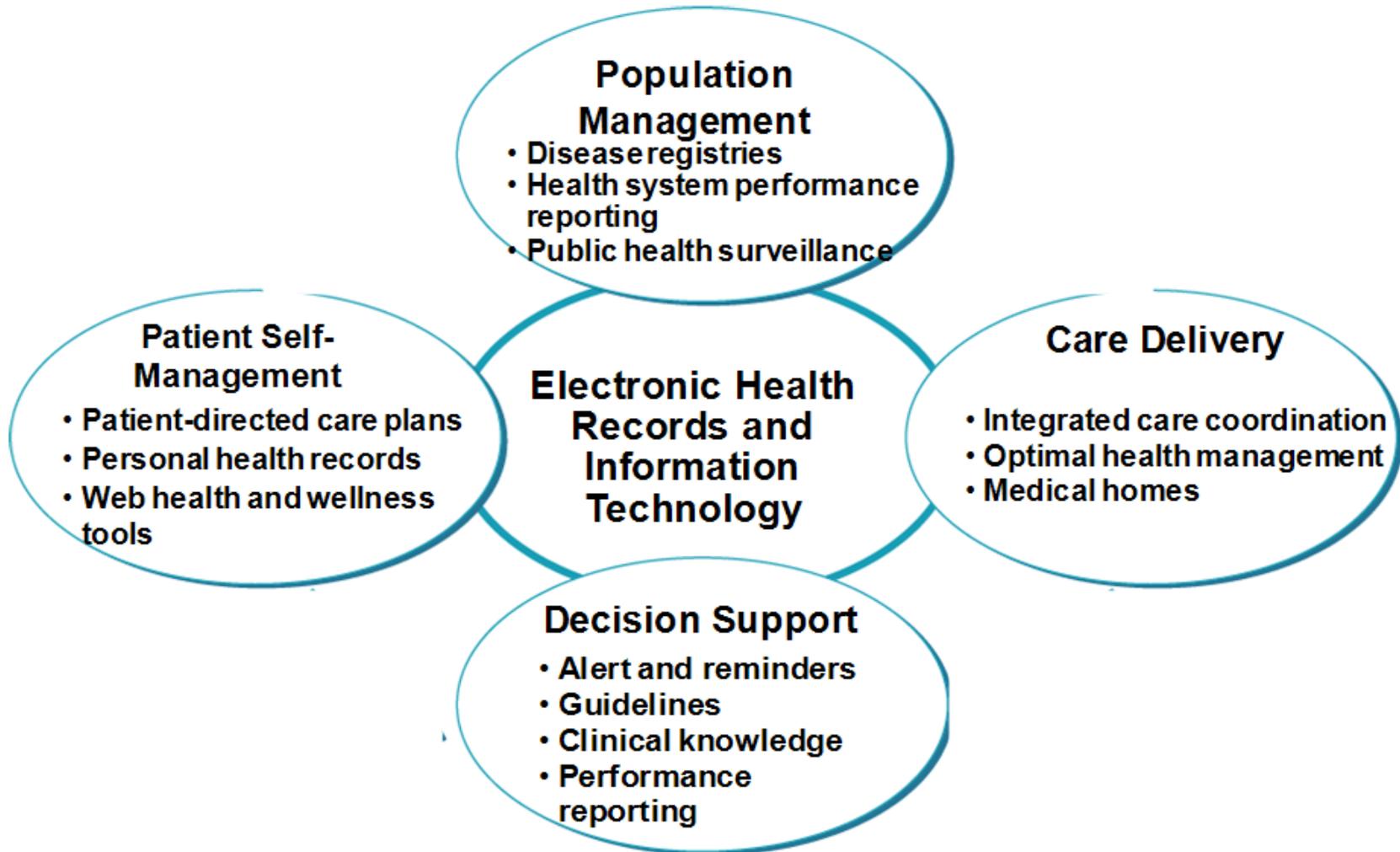
Common Solutions

Public Sector

# 21<sup>st</sup> Century Medicaid/SCHIP Agency Organizational Core Competency

<b>Customer Care</b>	<b>Operations</b>	<b>Medical Management</b>	<b>Financial Management</b>
<b>Web-based Electronic Eligibility Screening and Processing</b>	<b>Electronic Claims EDI</b>	<b>Utilization Management</b>	<b>Expenditure management</b>
<b>Web-based Provider Information Access and Administrative Functions</b>	<b>Provider Contracting &amp; Network Mgmt Tools</b>	<b>Quality Improvement Management</b>	<b>Rate Setting Reimbursement Management</b>
<b>Web-based Member Communications and Feedback</b>	<b>Health Information Exchange/ Electronic Health Records/E-Prescribing</b>	<b>Disease Management</b>	<b>Policy Modeling and Planning</b>
<b>Electronic Customer Relations Management Tools</b>	<b>Data Warehouse and Decision support tools</b>	<b>Case Management</b>	<b>Financial Performance Reporting</b>
<b>Web-based wellness and health promotion information</b>	<b>Electronic Encounter Reporting</b>	<b>Predictive Modeling and Medical Risk Management</b>	<b>Fraud and Abuse Monitoring</b>

# Health Information Technology as System Transformation Enabler





# **Value Proposition to Medicaid/SCHIP of Widespread Health Information Exchange**

Health information exchanges value to Medicaid/SCHIP:

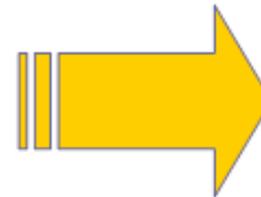
- Provides access to relevant and timely health information and electronic records at the point of care.
- Facilitates medical homes and coordination of care.
- Improves system medical and administrative efficiency.
- Provides greater health system accountability and transparency.

# Widespread Adoption of Electronic Health Records and Health Information Exchange Can Help Achieve Better Outcomes and Lower Cost

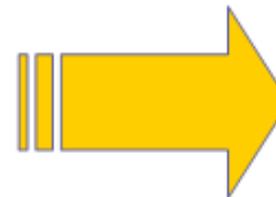
## Health Care Quality and Cost Performance

### *Value of HIE at Point of Care:*

- Improved patient safety
- Reduced rates of complications
- Reduced cost per episode of care
- Improved quality performance



Better outcomes

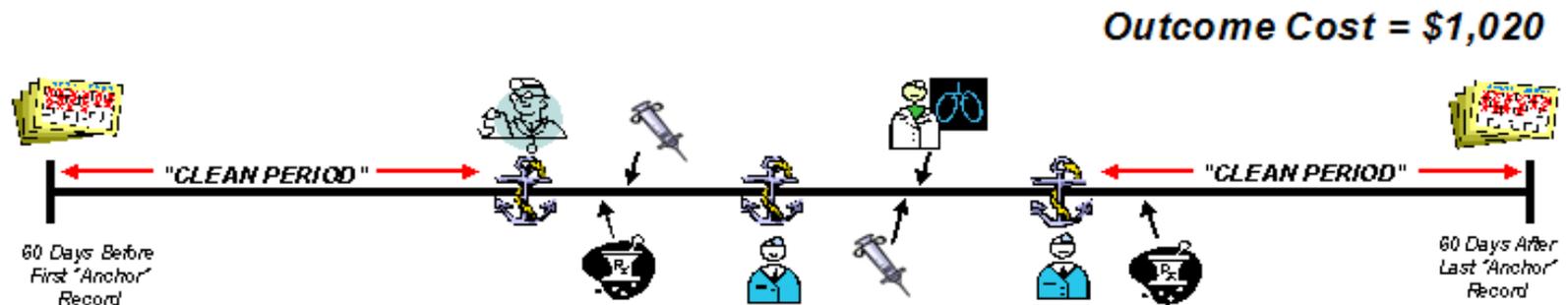


Lower costs

# Transparency of Cost and Quality

## Episode of Care Tracked through an EHR

THE LIFE OF A CHRONIC SINUSITIS (w/o SURGERY) EPISODE



Predicted Cost = \$950

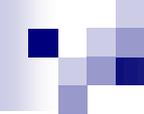


**First Anchor:** You visit your Primary Care Physician for sinusitis. He gives you a prescription and orders blood work. He is concerned that you have a history of sinus infections, so he refers you to an ENT. The PCP visit becomes the first anchor and, because it has been more than 60 days since you have visited him for sinusitis, it begins the episode. The PCP visit, prescription and lab work together form a cluster within the episode.

**Second Anchor:** You visit the ENT. She orders a sinus X-ray and more blood work. You schedule a follow-up appointment. The ENT visit, X-ray and lab work form another cluster within the same episode.

**Third Anchor:** You visit the ENT for your follow-up appointment. She tells you that the results of the tests came back negative. She prescribes a preventative medication to help reduce the occurrence of sinusitis. The ENT visit and prescription form another cluster within the same episode.

**Conclusion:** The medication worked and you have not been back to either doctor within 60 days from your last visit for this illness. Since it has been 60 days since the last anchor record for this illness, the episode is now considered concluded.



# **Medicaid/SCHIP Health System Transformation Performance Metrics**

- **Lower pharmacy Per Member Per Month (PMPM) cost**
- **Lower diagnostic PMPM cost**
- **Higher percentage of LTC members in home and community-based settings**
- **Lower bed days and admissions per 1,000**
- **Lower cost overall for long-term care PMPM cost**
- **High member satisfaction**
- **Higher provider satisfaction**
- **Lower number of emergency room visits per 1,000**
- **Greater health care access and quality of care**
- **Greater costs and quality transparency and program compliance accountability**
- **Improved administrative efficiency by reducing process information cycle times and administrative activities (e.g., medical audits, fraud detection, claims processing, etc.)**

# The Value of Health Information Exchange at Each Level of the Health System

## ■ **Providers of Care**

- Coordination of care
- Clinical decision making
- Administrative efficiency

## ■ **Managed Care Organizations**

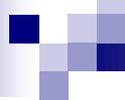
- Oversight and audit purposes
- Medical utilization review
- Disease and case management
- Quality improvement initiatives
- Pay for performance

## ■ **Medicaid/SCHIP Enterprise**

- Oversight and audit
- Disease and case management
- Quality improvement
- Quality and cost performance monitoring
- Fraud and abuse detection and investigation
- Population health management and health care policy formulation

# High-Value Health Information for Medicaid/SCHIP Providers

- Patient medication lists
- Lab results
- Immunization records
- Discharge summaries
- Patient-specific problem lists
- Newborn screening information
- Administrative and eligibility data
- Clinical notes
- Diagnostic images and reports
- Continuity of care record
- Public health reports
- Advanced directives



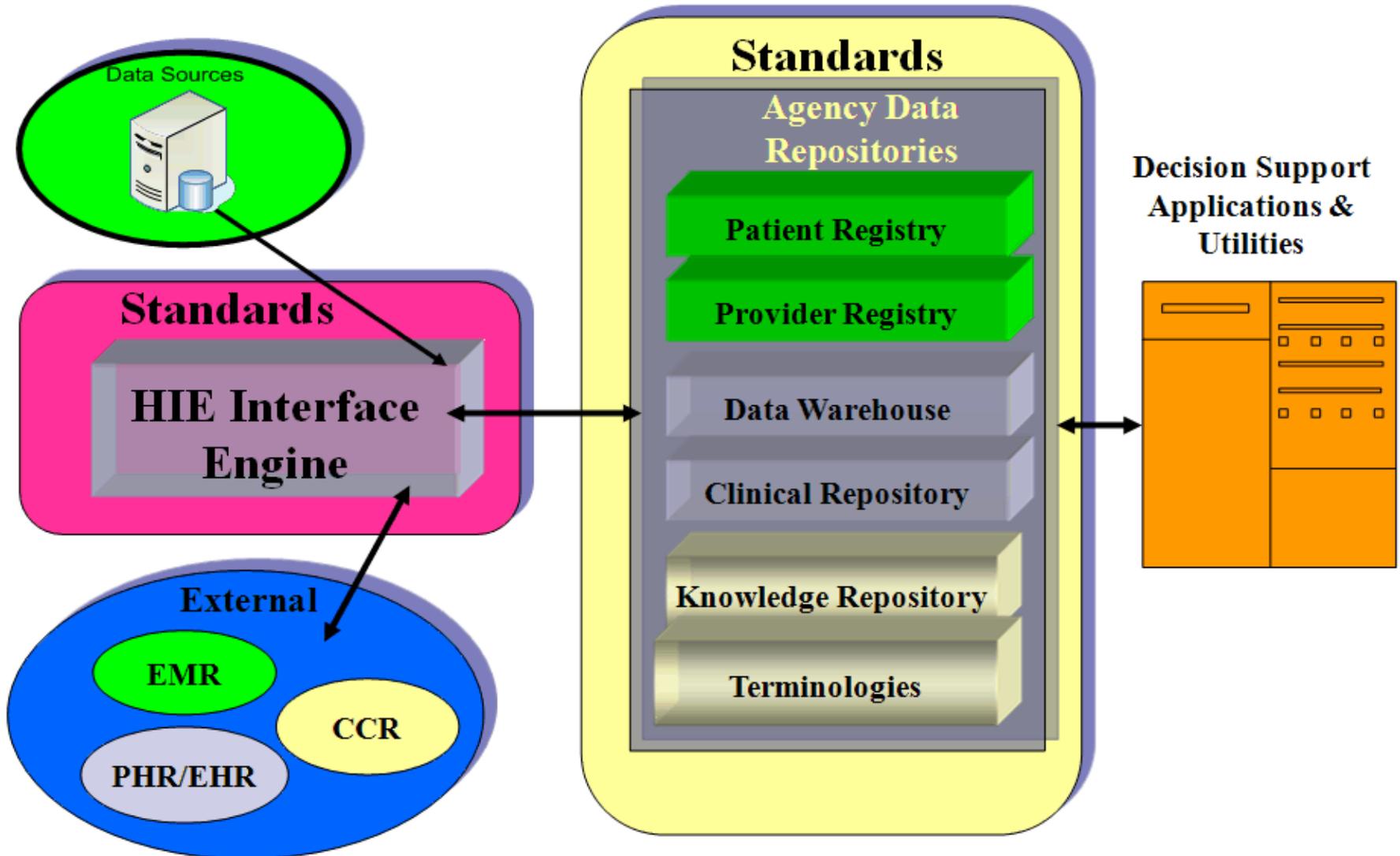
# High-Value Health Information for Medicaid Managed Care Organizations

- Medication history
- Newborn screening information
- Lab reports
- Discharge summaries
- Case management notes
- Immunization records
- Continuity of care records
- Medical care attachments
- Administrative and eligibility information

# High-Value Health Information for Medicaid/SCHIP Agencies

- Medication list
- Lab results
- Immunization records
- Discharge summaries
- Provider patient care plans
- Disease and case management notes
- Provider instant messaging
- Newborn screening information
- Continuity of care records
- Public health reports

# Electronic Health Information Conceptual Model For Medicaid/SCHIP Agency Data Exchange Relationships



# Roles for Medicaid/SCHIP Participation and Facilitation of Health Information Exchange

## ■ Medicaid Agency Health Information Exchange

- Implementation and management of health information exchange for providers
  - This is a viable solution for Medicaid/SCHIP programs with a dedicated provider network.
  - Assumes that HIE is part of Medicaid Agency MMIS environment.

## ■ Data Partner with RHIO

- Medicaid/SCHIP can provide administrative and health record information to providers through a RHIO.
- Facilitate public health information through the RHIO.

## ■ Data User

- Medicaid can participate as a data user receiving electronic health record data specific to Medicaid/SCHIP patients to facilitate fraud and abuse detection, oversight, and disease and case management.

# Medicaid/SCHIP Reimbursement and Financing of Health Information Exchange

**Federal financial participation is impacted depending on the reimbursement option chosen:**

## ■ **Direct Financing**

- Part of Agency MMIS environment allows agency to use 75/25 federal match for ongoing operations
- Medicaid Transformation Grants

## ■ **Contract Service**

- Contract with RHIO on a PMPM or transaction fee (this would be considered an administrative cost vs. a medical cost)
- Pay a data user fee

## ■ **Provider Reimbursement**

- Adjusted fee reimbursement for provider use of RHIO
- Provider RHIO participation financial incentive programs

## ■ **RHIO Equity Partner**

- RHIO annual participation or membership fee
- Direct investment in RHIO

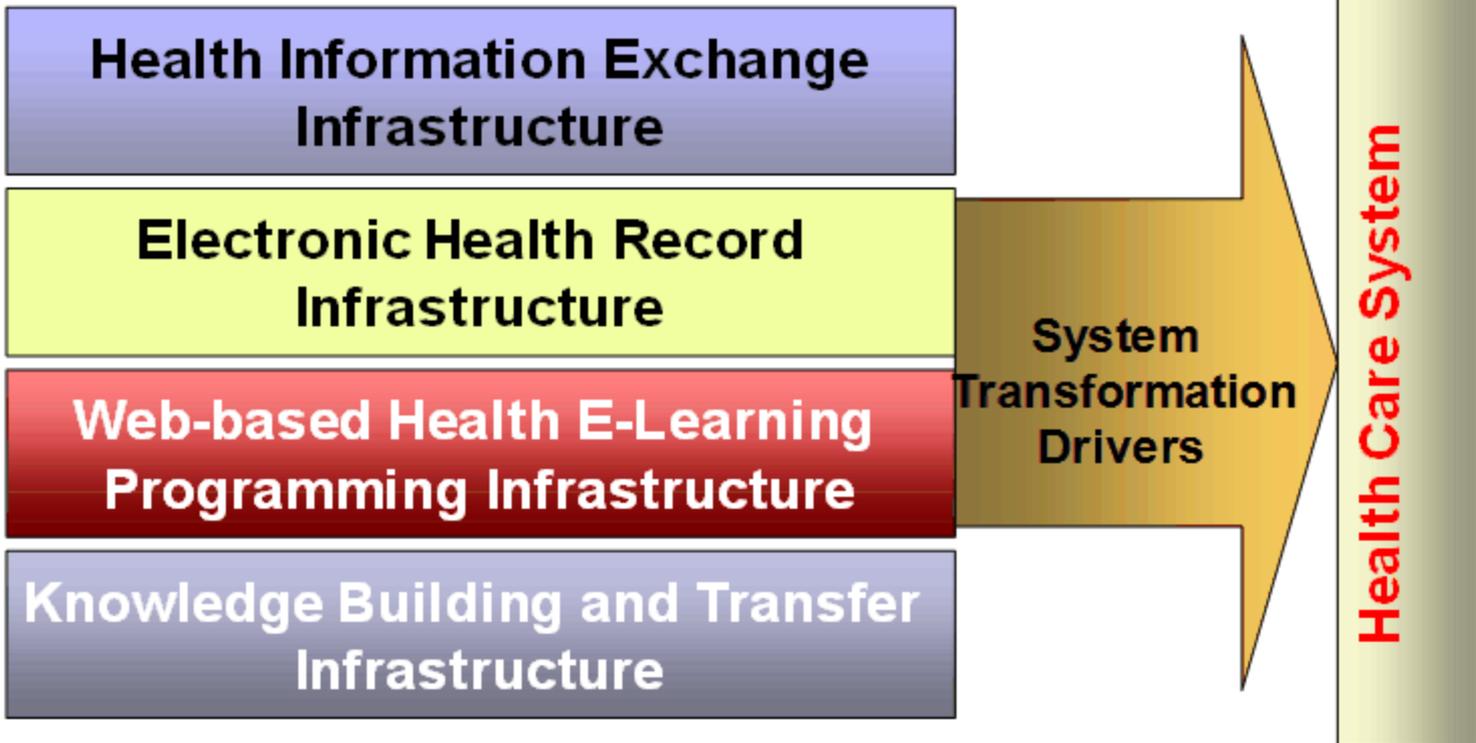


# **Policy Issues that Must Be Addressed To Facilitate Medicaid/SCHIP and Health Information Exchange**

- Patient consent and health data confidentiality requirements
- Use of Medicaid/SCHIP health data
- Liability and indemnification of health information exchanges
- Governance of HIE
- Audit and authentication processes
- Health information exchange operating standards and requirements

# Long-Term Vision of E-Health Infrastructure of Medicaid/SCHIP Health System Transformation

## Transforming IT Infrastructure

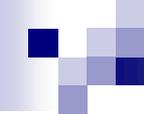




# Comments and Recommendations for Future Sessions

- Please send your comments and recommendations for future sessions to the project's e-mail address:

[Medicaid-SCHIP-HIT@ahrq.hhs.gov](mailto:Medicaid-SCHIP-HIT@ahrq.hhs.gov)



# Project Information

Please send comments and recommendations to:

[Medicaid-SCHIP-HIT@ahrq.hhs.gov](mailto:Medicaid-SCHIP-HIT@ahrq.hhs.gov)

or call toll-free:

**1-866-253-1627**

[Medicaid-SCHIP-HIT@ahrq.hhs.gov](mailto:Medicaid-SCHIP-HIT@ahrq.hhs.gov)

<http://healthit.ahrq.gov>