Exibhit Indiana®

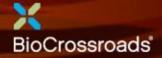# The nation's heart of Health Information Technology.

EXPANDING INDIANA'S BREAKTHROUGHS IN HEALTH INFORMATION TECHNOLOGY

BioCrossroads®

What is **Exibhit** Indiana® ?

- Exib**hit** Indiana is an initiative focused on **Ex**panding **I**ndiana's **B**reakthroughs in **H**ealth **I**nformation **T**echnology.

- BioCrossroads leads this effort to advance Indiana's national leadership in the development and effective use of health information technology (HIT).

- Indiana's breakthroughs in HIT are improving the quality and safety and the cost of health care throughout Indiana by using better information to deliver better patient care.

- As a collaboration of Indiana's state and local agencies, research institutions, healthcare providers, and health information exchanges and related enterprises, Exib**hit** Indiana leverages our state's unique depth and breadth of HIT to provide better healthcare at home and to serve as a national model for national HIT standards, products, devices and exchanges.

- Exib**hit** Indiana represents another life sciences economic cluster -- health information technology.

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Indiana is the heart of the nation's Health Information Technology (HIT)

✖ Indiana has developed one of the strongest and most robust health information technology sectors anywhere in the United States today, featuring:

- **Five health information exchanges (HIE)** operate self-sustaining and growing enterprises throughout the state– from South Bend to Evansville and Bloomington to Kokomo to Fort Wayne

- Through these five exchanges, more than **6.3 million messages** are exchanged every month

- More than **12,000 physicians** statewide are part of Indiana's health information exchange networks

- More than **12 million patient records** are part of Indiana's HIE networks

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ARRA Opportunity – the dawn of a whole new era for HIT

- Signed into law on February 17, 2009, the ARRA funds $35 billion in new programs advancing the development, adoption and use of health information technology to deliver better healthcare for hospitals, doctors and patients across the United States.

- Most of these funds are being deployed to promote the "meaningful use" by hospitals and physicians of health information technology to develop electronic patient records, report test results, prescribe medicines, record doctor visits and exchange clinical information among each provider of care for every patient.

- Most of America is not yet ready for the "digital age" of medicine. A recent national survey of doctors and hospitals found that less than 20% of physicians and less than 10% of hospitals currently employ even basic electronic health records for their practices and patients.

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Indiana's HITECH Funding for HIT and HIE Efforts to date = **$49.5 million**

Funding for Health Information Exchange

State Health Information Exchange Cooperative Agreement Program

- Indiana Health Information Technology Inc. has been established by the Governor to serve as a governance and contracting structure for extending health information technology exchange capabilities to every corner of the state
- Indiana Health Information Technology Inc. awarded $10.3 million on March 15.

Beacon Community Grant Program

IHIE awarded $16 million

Funding for Health Information Technology

Regional extension center for health information technology

- $12 million awarded to Purdue

Job training and educational/university grants

- $5 million awarded to Ivy Tech
- $4.8 million awarded to Indianapolis Private Industry Council
- $1.4 million awarded to Indiana University

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The Indiana landscape is conducive to achieving necessary, early success as we move to a national system flowing health information securely from coast to coast

- Indianapolis-based hospital systems are already freely exchanging data among one another (currently expanding across other communities throughout the state)
  - Indiana's medical malpractice environment allows hospitals and physicians to securely share data more readily than most states
- The Indiana network has also achieved effective interstate exchange of data.
  - HIOs in Indiana are now exchanging messages with Kentucky, Michigan and Ohio
- Indiana's privately funded collaborative model has enabled market driven advancement toward adoption and interoperability
- Regenstrief's INPC repository holds promise for the types of data that can be aggregated and analyzed to generate better health outcomes
  - The demographics of central Indiana's population can provide valuable insight into therapies for cardiovascular disease and metabolic disorders, as demonstrated by the work of Regenstrief and the Indiana Health Study of the Fairbanks Institute for Healthy Communities

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ARRA Opportunity – Indiana's strengths

✖ Indiana stands head and shoulders over the crowd. Extensive research and early leadership have driven the development of successful and sustainable health information exchanges in every corner of the state. Electronic health records for hospitals and physicians -- and personal health records for patients -- are an increasingly common feature of Hoosier healthcare.

✖ More than any other state, Indiana is prepared to put the HIT programs under ARRA to work. To understand how electronic clinical information is best developed, entered, accessed, analyzed, standardized, stored or exchanged – come to Indiana!
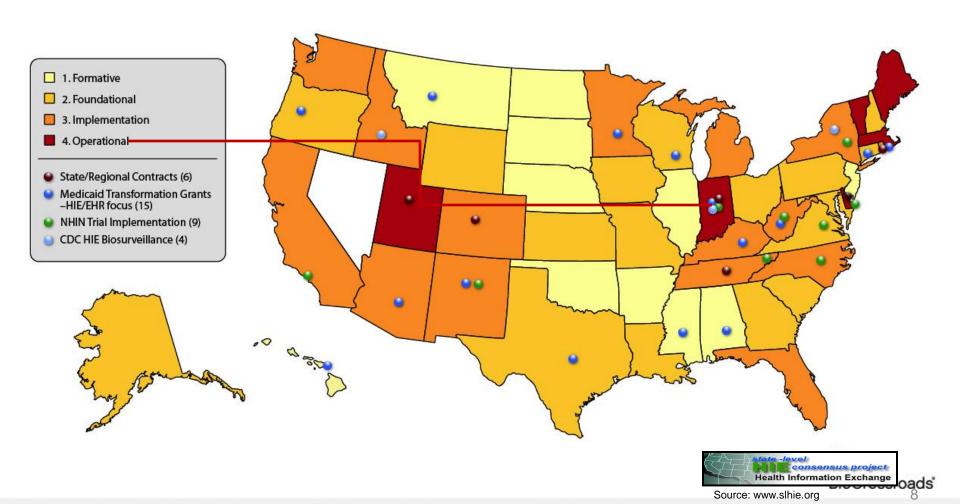
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Indiana's HIT strengths give us a head start in achieving meaningful use

U.S. HIT Implementation Readiness: Landscape as of December 2008

Legend:
- 1. Formative
- 2. Foundational
- 3. Implementation
- 4. Operational

- State/Regional Contracts (6)
- Medicaid Transformation Grants – HIE/EHR focus (15)
- NHIN Trial Implementation (9)
- CDC HIE Biosurveillance (4)

state -level
HIE consensus project
Health Information Exchange

Source: www.slhie.org

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Indiana's Health Information Exchanges

Health Information Exchanges Serving Indiana

IHIE SERVICE	HealthBridge	HealthLINC	Indiana Health Information Exchange	Med Web	Michiana Health Information Network
Clinical Messaging	Live	Live	Live	Live	Live
Medication History	Live	Live	Live	Live	Live
Quality Metrics/Disease Management	Live	Pilot	Live	Live	Pilot
Administrative Data Sharing	Live	Live	Live	Live	Live
Medication Compliance/Reconciliation	Live	Pilot	Planned	Live	Pilot
e-Prescribing (e-Rx)	Live	Live	Planned	Live	Pilot
Personal Health Record	Planned (3Q 2010)	Pilot in community		Live	Planned
EMR-Lite/Right	Live	Live	Live	Live	Live
Secondary Use (research)	Live	Planned (4Q 2010)	Planned	Live	Live
Consumer Access to Health Information	Planned (3Q 2010)	Planned (4Q 2010)		Live	Planned
Public Health Surveillance	Live	Live (public health alerts)	Live	Live	Partial Implementation
Public Health Reporting	Live	Planned	Live	Live	Live

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Indiana's HIT Assets

- Indiana has:
  - A group of the nation's largest and longest-running HIEs
  - Innovative, entrepreneurial companies that are developing cutting-edge HIT services and software
  - One of the largest and most comprehensive medical informatics laboratories in the world as well as premier research and higher learning institutions
  - **Government/Community**: BioCrossroads, Indiana Health Informatics Corporation, Indiana Health Information Technology Inc.
  - **Academic:** Regenstrief Institute, Regenstrief Center for Health Care Engineering, IU School of Informatics
  - **Enterprises:** Indiana Health Information Exchange, Med-Web, Medical Informatics Engineering, Michiana Health Information Network, HealthLINC, HealthBridge

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COMMUNITY/GOVERNMENT

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BioCrossroads is Indiana's initiative to grow, advance and invest in the life sciences, an organization that supports the region's research and corporate strengths while encouraging new business development.   BioCrossroads provides money and support to life sciences businesses, launches new life sciences expands collaboration and partnerships among Indiana's life science institutions, promotes science education and markets Indiana's life sciences industry.

Role   Spearheading Exib**hit** Indiana to advance Indiana's national leadership in the development and effective use of health information technology (HIT)

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Indiana Health Informatics Corporation

The Indiana Health Informatics Corporation is a public-private corporation created by the State of Indiana to guide and promote health information exchange within the state and engage and facilitate the development of other health informatics functions in Indiana. IHIC was created out of the believe that HIE is in the best interest of Indiana and its citizens and in that it supports improvements in the quality, safety, and efficiency of healthcare.

Role

IHIC's organizational role is to act as a strong advocate for education, development, and promotion for health information exchange within Indiana. Specifically, IHIC focuses on supporting data availability, improving clinical quality, enhancing patient safety, and applying local/state/federal policy by working to help HIE organizations expand and integrate within Indiana .

Vision

IHIC is working to support the four IHIC Board-approved targeted visions related to supporting enhanced healthcare information exchange in Indiana:
- Value-Based Reimbursement Program in Indiana
- Medication List Availability
- Community Health Record in Indiana
- Clinical Information Supporting Coordination of Care

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Indiana Health Information Technology Inc.

✖ Indiana Health Information Technology, Inc. (IHIT) is a new state-chartered non-profit entity that serves as a governance and contracting structure for extending health information technology networks to every corner of the state

✖ To accomplish this mission, IHIT will work with Indiana's robust private sector of five HIOs

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ENTERPRISES

EXPANDING INDIANA'S BREAKTHROUGHS IN HEALTH INFORMATION TECHNOLOGY

Indiana Health Information Exchange

The Indiana Health Information Exchange (IHIE) is an Indianapolis-based not-for-profit offering services that provide patient records and test results via computer to hospitals and doctors across Indiana. Using software and processes developed at the internationally known Regenstrief Institute (RI), IHIE , together with RI, has built the largest health information exchange in the country.

Services	Clinical Messaging	Quality Reporting/Clinical Alerts and Reminders
	Public Health Alert Messaging	Clinical repository services*
	Electronic Medication List	*the Regenstrief Institute's Indiana Network for Patient Care
Reach	Indianapolis (9 county region), Evansville, Terre Haute, Kokomo, Lafayette, Northwest Indiana, Vincennes, Crawfordsville	
Details	Established in **2004**	
	Sends **5 million messages** per month across Indiana	
	Has more than **10 million patient records** in network	
	Has more than **12,000 physicians** in network	
	Participant in National Health Information Network	
	Designated by the Agency for Healthcare Research and Quality (AHRQ) as a Chartered Value Exchange (CVE)	
	TechPoint 2009 Mira Awards winner – Health Care IT Innovation	

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Med-Web was created under the guidance of Doug Horner's white paper "The Medical Web Project". Today, the Med-Web provides messaging services, connectivity, and medical system access to roughly 90 percent of the practicing physicians in the Fort Wayne, IN MSA.

Services	Clinical messaging, physician directory services, physician portal, hospital portal, hospital system access, secure email, claims transmission, quality reporting, and safety-net healthcare backbone.	Telecommunications "backbone" with telephony interfaces to support dictation and transcription, inbound/outbound faxing, DICOM support, national reference lab, and Internet service provision.
Reach	Allen County, IN and contiguous communities as well as communities in Western Ohio, Northeastern IN and parts of Central IN	
Details	Established in **1995** Sends **approx. 1.4 million messages** per month across Indiana Transmits roughly **585,000 daily email messages** Provides **backbone to the Healthcare Access Program**, the coalition providing care to Northeast Indiana's indigent population. Has more than **700+ physicians** in network	

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Medical Informatics Engineering (MIE) creates secure medical networks for the transmission of clinical data, under the guidance of Doug Horner's white paper entitled "The Medical Web Project". Today, the Med-Web provides messaging services, connectivity, and medical system access to roughly 90% of the practicing physicians in the Fort Wayne, IN MSA. MIE is also the creator of the Web-based WebChart Minimally Invasive Electronic Health Record (EHR) suite of products and the NoMoreClipboard.com personal health record suite.

Services

Web-based EHR combines document management, dictation and transcription, digital radiography, interoperability, and electronic encounter documentation. NoMoreClipboard.com – is a patient-controlled Personal Health Record solution that securely shares information provided by patients to MIE's WebChart solution through the use of the FroozHIE data reconciliation tool

Reach

MIE has implemented its solutions at client sites in the United States (18 states), Canada, and is currently implementing WebChart in several global locations.

Details

Approximately **1,200 physicians** use Web Chart EHR solution
MIE was among the first entities to receive Certification Commission for Healthcare Information Technology (CCHIT) certification
MIE's EHR solution is interoperable with Google Health and Microsoft HealthVault
WebChart is CORE certified- electronically coordinates benefit and eligibility information with payors.
WebChart used by Dow Chemical, Eli Lilly and Google.
WebChart is the preferred EHR solution of the American College of Cardiology, and is certified as a compliant solution with its IC3 program.
WebChart functionality supports both the CMS Physician Quality Reporting Initiative and ePrescribing initiatives, allowing WebChart physicians to participate in currently-available incentive programs.

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NoMoreClipboard.com

NoMoreClipboard.com is an online, patient-managed, portable personal health record that enables consumers to compile, manage and share their health information. NoMoreClipboard is fully interoperable with other healthcare IT applications using standard integration protocols, enabling the smooth exchange of electronic data. NoMoreClipboard enables consumers to send their PHR to paper based physicians on the specific registration forms used by each individual practice.

Services

NoMoreClipboard is a portable, online PHR that enables consumers to compile, manage and share their health records

Reach

NoMoreClipboard is being deployed on a national basis.

Details

Selected by CMS to participate in a PHR pilot in Arizona and Utah.
Deployment in several pilot programs with the Department of Defense.
Selected to participate in the HHS National Health Information Network demo.
Deployed at Indiana University where students can create an IU branded PHR.
Deployed as part of a patient portal solution at several health systems including Bon Secours and Meridian Health.
Integrated with consumer health platforms from Google Health and Microsoft HealthVault.

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mhin
Michiana Health
Information
Network

MHIN is a community health information exchange that provides secure, single source access to patient clinical information from participating organizations throughout the region. Since its inception in 1998, MHIN has enabled healthcare providers and the community to benefit from sophisticated clinical information systems that improve efficiency and patient care in an economically responsible manner.

Services	Clinical repository	Integrated
	Clinical messaging	Payor -based case management
	Results delivery	Electronic health record
	Clinical documentation	Data management services
	Health department reporting	Health department reporting
Reach	St. Joseph, Elkhart, Marshall, LaPorte, Porter, Lake, Fulton, Cass, Howard, Miami and Pulaski counties in Indiana (plus Berrien County in Michigan)	
Details	Sends **1.35 million messages** per month	
	Electronically interface over **800,000 transactions** per month to EHRs	
	10- year clinical data repository with a community record	
	Has more than **500,000 patient records** in network	
	Has **750 physicians** in network	
	CCHIT certified Electronic Health Record	
	CCHIT certification workgroup member	
	Nationally recognized as one of the oldest sustainable health exchanges	

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healthLINC
CONNECT. CARE. COLLABORATE.

HealthLINC is a nonprofit corporation founded in 2007 to provide a common technology infrastructure for sharing health information electronically. HealthLINC operates in a multi-county area of Southern Indiana. HealthLINC delivers more than 130,000 clinical results each month to more than 30 physician practices.

Services	Clinical messaging and results delivery Public health alerts
Reach	Bloomington Hospital, Bloomington Hospital of Orange County in Paoli, Indiana and Southern Indiana Radiological Associates in multi-county area
Details	Established in **2007** Sends **130,000 messages** per month across Indiana Has more than **175,000 patient records** in network Has more than **200 physicians** in network **Nationwide Health Information Network II Grantee 2008 and 2009** **eHealth Initiative Award for Aligning incentives and Sustainability (with HealthBridge)**

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HealthBridge

HealthBridge is a nonprofit corporation founded in 1997 to provide a common technology infrastructure for sharing health information electronically. HealthBridge operates in the Greater Cincinnati tri-state area including parts of Southwest Ohio, Northern Kentucky and Southern Indiana. HealthBridge also provides health information exchange services to other communities, including HealthLINC in Bloomington, IN.

Services	Clinical messaging and results delivery Ambulatory order entry Electronic disease reporting and public health alerts
Reach	Indiana - suburban Cincinnati counties - Dearborn, Ohio, and Franklin counties as well as Margaret Mary Community Hospital in Batesville, IN (Franklin and Ripley Counties); Brown, Butler, Clermont, Hamilton and Warren counties in Ohio; and Boone, Campbell, Kenton, Grant Counties in Kentucky
Details	Established in **1997** Sends an estimated **50,000 messages** in Southwestern Indiana, roughly 3 million results sent within entire network (includes Ohio and KY) Has more than **80,000 patient records** in Southwestern Indiana / 2.5 million total patients Has estimated **100 physicians** in Southwestern Indiana and 5,252 total physicians active in HealthBridge **Nationwide Health Information Network II Grantee** **Designated by the Agency for Healthcare Research and Quality (AHRQ) as a Chartered Value Exchange (CVE)** **Robert Wood Johnson Foundation Aligning Forces for Quality Initiative participant** **eHealth Initiative Award for Aligning incentives and Sustainability**

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ACADEMIC

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Regenstrief Institute

The Regenstrief Institute is an internationally recognized informatics and healthcare research organization, dedicated to the improvement of health through research that enhances the quality and cost-effectiveness of healthcare. It is partially supported by the Regenstrief Foundation and with federal grants, contracts, and other support generated by Institute investigators. It is closely affiliated with the Indiana University School of Medicine and the Health and Hospital Corporation of Marion County, Indiana. The Institute has one of the largest and most comprehensive medical informatics laboratories in the world, and is a unique State asset.

Indiana Network for Patient Care	The Regenstrief Institute operates the Indiana Network for Patient Care (INPC), the system that securely aggregates and accurately delivers patient information such as lab results, reports, medication histories, treatment histories and more in a standardized, electronic format, across healthcare providers. It is widely considered the nation's most advanced and secure community health record system.
Significant Contributions	In addition to developing the INPC, Regenstrief Investigators have made many historical, ground-breaking contributions to the science of health informatics including: • The RMRS -- one of the **first electronic medical record systems; in continuous use since 1973** • **Participant in the National Health Information Network** • **Leaders in clinical standards development** and use: HL7, UCUM and LOINC® • **Assists ISDH in statewide syndromic surveillance efforts** called Public Health Electronic Syndromic Surveillance (PHESS) • Developed and maintains **clinician-facing software**: Gopher, and OpenMRS, a community-developed, open-source, electronic medical record system framework. • **National Leadership participation**: Members, NCVHS and newly formed National HIT Committee

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Regenstrief Center
for Healthcare Engineering

The Regenstrief Center for Healthcare Engineering (RCHE) is an interdisciplinary research center that applies concepts from engineering, science, management, and more to the healthcare system with the goal of improving healthcare delivery. Working with RCHE partners ranging from hospitals to insurers to professional organizations, researchers cover a wide range of disciplines and perspectives. RCHE is funded by the Regenstrief Foundation and is located in Discovery Park on Purdue's West Lafayette campus.

Services	RCHE's HIT research focuses primarily on system improvements and implementation, and supporting process improvement that underlies "meaningful use" of an information technology.
Reach	State-wide. RCHE can assist with implementation of innovations with Purdue partner HealthcareTAP, and has extensive experience working with Purdue Extension offices, which touch all 92 Indiana counties.
Details	RCHE is a multidisciplinary center and works with Purdue IT groups such as the Center for Education and Research in Information Assurance and Security (CERIAS), computer science, computer technology, and clinical sciences such as pharmacy and nursing. Established partnerships with non-university healthcare organizations and companies allow RCHE to contribute both technical expertise and credibility to the diverse provider groups targeted for IT adoption and meaningful use.

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SCHOOL OF INFORMATICS
INDIANA UNIVERSITY

The Indiana University School of Informatics offers three degree programs in Indianapolis which directly support health information technology initiatives in the state of Indiana.

HIT Projects

Recent Health Informatics faculty and research projects include new approaches to extracting knowledge from clinical databases, finding new ways to share healthcare decision support data, and assisting cancer patients undergoing chemotherapy via sophisticated web-based decision support tools.   At IU- Bloomington, projects include disease models that simulate world-wide epidemics and home-based ubiquitous health computing applications which allows frail elderly to continue to live in their homes

Programs

The Health Information Administration (HIA) Undergraduate Degree
Health information professionals work with clinical, financial and administrative staff in health care to interpret data for patient care, conduct statistical reporting and planning as well as medical research. They are experts in coding and classification systems, managing patient health information and administering computer information systems.

The Master of Science in Health Informatics (HI)
Health Informatics uses information technology along with information management concepts and methods to improve the delivery of healthcare. This program prepares the students to play key roles in the areas of computerized patient records, cost reimbursement, clinical decision support systems and integrated health information systems.

The Informatics Doctoral Program
Students who specialize in health informatics study such topics as electronic health records, health data exchange, standards and terminology for health data, clinical decision support, consumer health informatics, technology to enhance patient safety, teleheath application development and implementation, ontologies, mining clinical data and natural language processing.

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