

**eHealth Initiative's  
Fifth Annual Survey of Health Information Exchange  
At the State and Local Levels**

**Overview of 2008 Findings**

**September 2008**

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Fifth Annual Survey of Health Information Exchange  
At the State and Local Levels**

**OVERVIEW OF 2008 FINDINGS**

**STATE OF THE FIELD: SURVEY RESULTS INDICATE CONTINUED PROGRESS**

In 2005, eHI developed a framework for assessing and tracking health information exchange development. As a result of working with hundreds of leaders involved in the development and implementation of health information exchange-related activities, eHI identified seven stages of development (see chart below). Most initiatives focused on health information exchange will move through these predictable stages of development, but at a varying pace.

In 2008, 130 initiatives participated in the *2008 eHealth Initiative Annual Survey of Health Information Exchange at the National, State and Local Levels*. There is a growing group of organizations who report that they are in an advanced stage or operational stage of development (Stages 5, 6, and 7). These "operational" health information exchange initiatives are closely reviewed as part of the 2008 survey report, as their experiences lend particularly helpful insight into factors for success.

<b>Stage 1</b>	Recognition of the need for health information exchange among multiple stakeholders in your state, region or community. (Public declaration by a coalition or political leader)
<b>Stage 2</b>	Getting organized; defining shared vision, goals, and objectives; identifying funding sources, setting up legal and governance structures. (Multiple, inclusive meetings to address needs and frameworks)
<b>Stage 3</b>	Transferring vision, goals and objectives to tactics and business plan; defining your needs and requirements; securing funding. (Funded organizational efforts under sponsorship)
<b>Stage 4</b>	Well under way with implementation - technical, financial and legal. (Pilot project or implementation with multiyear budget identified and tagged for a specific need)
<b>Stage 5</b>	Fully operational health information organization; transmitting data that is being used by healthcare stakeholders.
<b>Stage 6</b>	Fully operational health information organization; transmitting data that is being used by healthcare stakeholders and have a sustainable business model.
<b>Stage 7</b>	Demonstration of expansion of organization to encompass a broader coalition of stakeholders than present in the initial operational model.

} **Operational Health Information Exchange Initiatives**

## **The number of operational health information exchange initiatives has increased considerably.**

The 2008 survey results indicate 42 operational health information exchange initiatives—up from the 32 reporting in 2007—indicating a 31% increase. All 32 operational health information exchange initiatives who responded in 2007 continue to be in operation in 2008.

## **The 2008 survey counts 18 new health information exchange initiatives.**

Eighteen new health information exchange initiatives not included in the 2007 survey reported findings in 2008, demonstrating increased interest in and momentum for the use of health information exchange to improve the quality, safety and efficiency of health care in the U.S.

## **The number of health information exchange initiatives in each phase of development are evenly dispersed.**

Thirty-nine of the initiatives included in the 2008 survey are just getting started with health information exchange, 36 are in the process of implementation, and 42 are operational.

## **State and local health information exchange efforts continue to view the engagement of multiple stakeholders as a priority.**

Stakeholders participating in the governance of health information exchange efforts include:

- Hospitals (51%)
- Primary care physicians (39%)
- Health plans (32%)
- Community health clinics (28%)
- Employers (26%)
- Patient or consumer groups (24%)
- Local public health departments (23%)
- Specialty care physicians (23%), and
- Quality improvement organizations (17%).

## **The most important drivers for operational initiatives include those related to improving quality, improving patient safety, rising health care costs and addressing inefficiencies experienced by providers.**

As in 2007, the most significant drivers for health information exchange were “improving quality” (97%) and “improving patient safety” (90%). In addition, “rising health care costs” (68%) and “inefficiencies experienced by providers” (64%) were cited as significant drivers.

## **The most significant challenge for all efforts continues to be the development of a sustainable business model.**

Fifty percent of all 130 included in the 2008 survey cited this as a very difficult challenge and an additional 32% citing this as a moderately difficult challenge. At the same time, 36% of operational initiatives cite the development of a sustainable model as a very difficult challenge, with an additional 36% citing this as a moderately difficult challenge.

**HEALTH CARE IMPACT:  
SURVEY RESULTS SHOW GROWING IMPACT ON  
LOWERING COSTS AND IMPROVING CARE**

**A majority (69%) of the fully operational exchange efforts (29/42) report reductions in health care costs.**

In 2008, nineteen operational initiatives reported that their efforts had resulted in reduced staff time, eleven reported there were decreased dollars spent on redundant tests, five documented a reduction in patient admissions, and five initiatives decreased cost of care for chronic care patients.

**About half (52%) of fully operational exchange efforts (22/42) report positive impacts on health care delivery.**

In 2008, 16 reported improved access to test results; 13 reported improved quality of practice life; nine reported decreased support staff; eight reported improved compliance with chronic care and prevention guidelines; six reported better care outcomes for patients; four reported a decrease in prescribing errors; and four reported increased recognition of disease outbreaks.

**For the first time, a majority (69%) of operational exchange efforts (29/42) report a positive financial return on their investment (ROI) for their participating stakeholders.**

Thirteen operational initiatives reported they were able to quantify an ROI for hospitals, nine reported an ROI for physicians practices, six reported an ROI for health plans, and five for independent laboratories.

**PRIMARY FOCUS CONTINUES TO BE ON CARE DELIVERY, BUT FOCUS ON IMPROVING POPULATION HEALTH CONTINUES TO INCREASE**

**Across the board, a larger number of operational health information exchange initiatives are exchanging data.**

In 2008, a total of 26 operational initiatives reported that they are exchanging laboratory results, up from 19 in 2007 and 23 are exchanging outpatient episodes up, from 21 in 2007. In addition the number of operational initiatives exchanging radiology results (23), inpatient episodes (22), dictation/transcription data (20) and emergency department episodes (20) all increased from 2007.

<b>Data Currently Exchanged</b>	<b>2008</b>	<b>2007</b>
Labs	26	19
Outpatient Lab Results	25	19
Outpatient Episodes	23	21
Radiology Results	23	15
Inpatient Episodes	22	16
Dictation/Transcription	20	14
ED Episodes	20	15
Outpatient Prescriptions	19	15
Claims	18	13
Pathology	18	14
Enrollment/Eligibility	17	16
Cardiology	15	13
GI	14	12
Pulmonary	13	13
Retail Pharmacy	12	11
Radiology Images	7	7
Patient Reported Data	4	6

**As in previous years, health information exchange initiatives are continuing to focus their efforts on supporting direct care delivery.**

2008 survey results show that 26 of the 42 operational initiatives are offering clinical messaging, results delivery, or clinical documentation as one of their services. Sixteen are providing either alerts to providers, consultation/referral services or enrollment or eligibility checking.

**In addition to improving care delivery, tackling population health challenges continues to be a goal of many operational health information exchange efforts.**

Ten of the 42 operational initiatives are offering disease or chronic care management services, eight are offering quality improvement reporting for clinicians, six are offering public health reporting, and five are offering quality improvement reporting for purchasers or payers.

<b>Functionalities Provided By Operational HIEs</b>	<b>2008</b>	<b>2007</b>
Results Delivery	26	18
Clinical Documentation	26	17
Enrollment or Eligibility Checking	16	15
Consultation/Referral	16	14
Alerts to Providers	16	12
Electronic Referral Processing	15	9
Disease or Chronic Care Management	10	8
Reminders	8	8
QI Reporting for Clinicians	8	7
Disease Registries	7	6
Public Health: Surveillance	6	6
Quality Performance Reporting for Purchasers or Payers	5	6
Public Health: Electronic Lab Reporting	5	7
Patient Access to Info	5	3
Patient Provider Clinical Exchange	4	3
Public Health: Case Mgt	3	5
Patient-Provider Email	2	2
Patient-Provider Other Communication	1	3



**Operational health information exchange initiatives are increasingly adding support functions to augment data services.**

There has been a significant increase in the number of operational health information exchange initiatives offering additional support services, with 31 initiatives offering a help desk function; 24 providing implementation guides; and 22 initiatives both supporting practicing clinicians with work-flow analyses and adoption of electronic health records. Six initiatives are coordinating financial incentives.

## **FINANCING CONTINUES TO BE A CHALLENGE**

**The most significant challenge for all efforts continues to be the development of a sustainable business model.**

Fifty percent of all 130 included in the 2008 survey cited this as a very difficult challenge and an additional 32% citing this as a moderately difficult challenge. At the same time, 36% of operational initiatives cite the development of a sustainable model as a very difficult challenge, with an additional 36% citing this as a moderately difficult challenge.

**In addition to developing a sustainable business model, securing upfront funding is a significant challenge for all health information exchange efforts.**

Seventy-nine percent of the 130 efforts reporting in the 2008 survey cite that securing upfront funding with 79% citing this as a very difficult or moderately difficult challenge.

**Hospitals and the federal government top the list as the most prevalent upfront funding source for operational health information exchange efforts.**

Forty-eight percent of operational efforts received upfront funding from hospitals and a similar percentage received funding from the federal government, followed by 33% from state government, 26% from private payers, and 24% from philanthropic sources.

**Operational health information exchange initiatives are no longer dependent on federal funds.**

Seventy-one percent of the 42 operational health information exchange initiatives who responded to the 2008 survey communicated that they were no longer reliant on federal funds to support their sustainability. This is up from the 56% in 2007.

**Hospitals also topped the list for providing financial support for ongoing operations.**

Sixty-two percent of operational health information exchange initiatives are receiving funds from hospitals to support ongoing operations, followed by physician practices (38%), the federal government (36%), private payers (29%), state government (26%), and public payers (24%).

**Most operational health information exchange initiatives utilize subscription fees or membership fees as their mechanism for payment to support ongoing operations.**

According to the 2008 survey results, 18 operational health information exchange initiatives are utilizing subscription fees or membership fees from data users or data providers (16 initiatives) to support ongoing operations. Eight organizations are charging transaction fees to data providers, while seven operational initiatives charge transaction fees to data users.

**There was a notable increase in the number of operational HIE revenue models that include non-clinical/administrative services.**

Specifically, models that are providing services that reduce interfaces for electronic medical record vendors increased to 16 from six in 2007; distribution services, such as distributing reports to physicians increased to 13 up from four in 2007; and services to assist with data loads into electronic medical records increased to ten up from five in 2007.

## 2008 Survey Participants

130 initiatives participated in the *2008 eHealth Initiative Annual Survey of Health Information Exchange at the State, Regional and Community Levels*. The list below is not a complete list of survey participants. Some respondents have requested that we not release the name of their organization.

### Alaska

Alaska ChartLink (Alaska RHIO), Fairbanks, AK  
Alaska Tribal Health System Multi-Facility Integration (MFI), Anchorage, AK

### Alabama

Montgomery Area Wellness Coalition (formerly Mid-Alabama Information Network (MAIN)), Montgomery, AL

### Arkansas

Arkansas Foundation for Medical Care, Little Rock, AR

### Arizona

AHCCCS HIE-EHR Project, Phoenix, AZ  
Arizona Health-e Connection, Phoenix, AZ  
Arizona Rural Hospital Flexibility Program, Tucson, AZ

### California

California Regional Health Information Organization – CalRHIO, San Francisco, CA  
Fresno Healthy Communities Access Partners, Fresno, CA  
Health-e-LA, City of Industry, CA  
Northern Sierra Rural Health Network, Nevada City, CA  
Redwood MedNet, Ukiah, CA  
San Diego Medical Information Network Exchange (SDMine), San Diego, CA  
Santa Cruz County Health Information Exchange, Santa Cruz, CA

### Colorado

Colorado Regional Health Information Organization (CORHIO), Denver, CO  
Community Health Partnership, Colorado Springs, CO  
Quality Health Network, Grand Junction, CO

### Connecticut

eHealth Connecticut, Inc., Hartford, CT

### Delaware

Delaware Health Information Network (DHIN), Lewes, DE

### District of Columbia

DC Primary Care Association, Washington, DC

### Florida

Big Bend RHIO, Tallahassee, FL  
Central Florida Regional Health Information Organization, Inc. (CFRHIO), Orlando, FL  
Duval County Health Department, Jacksonville, FL  
Florida Health Information Network, Agency for Health Care Administration, Tallahassee, FL  
Greater Ocala Health Information Trust, Ocala, FL  
Northwest Florida Regional Health Information Organization (NWFL-RHIO), Pensacola, FL  
South Florida Health Information Initiative, Miami, FL  
Health First, Inc (Space Coast HIN), Rockledge, FL

### Georgia

Georgia Health Information Technology and Transparency, Atlanta, GA

**Hawaii**

Hawaii Business Health Council, Honolulu, HI

**Iowa**

Iowa Department of Public Health, Bureau of Health Care Access, Iowa Medicare, Des Moines, IA  
Iowa Foundation for Medical Care, West Des Moines, IA

**Idaho**

North Idaho Rural Health Consortium, Coeur d'Alene, ID

**Illinois**

Association of Community Mental Health Authorities of Illinois Local Funds Initiative, Urbana, IL  
Illinois Department of Public Health (Department of Healthcare & Family Services), Springfield/Chicago, IL

**Indiana**

HealthLINC (formerly Bloomington eHealth Collaborative), Bloomington, IN  
Indiana Health Information Exchange Indianapolis, IN  
Michiana Health Information Network South Bend, IN

**Kansas**

Kansas Health Policy Authority, Topeka, KS  
Manhattan Community Network (formerly Kansas State University (Pioneer Health Network, Wichita safety net clinics, etc.)), Manhattan, KS

**Kentucky**

Louisville Health Information Exchange (LouHIE), Louisville, KY

**Louisiana**

Blue Cross Blue Shield Louisiana, Baton Rouge, LA

**Massachusetts**

MA-SHARE, LLC, Waltham, MA  
Masspro - DOQ-IT pilot, Waltham, MA  
New England Healthcare EDI Network (NEHEN), Waltham, MA  
SAFEHealth, Worcester, MA

**Maryland**

Metro DC Health Information eXchange (MeDHIX), Silver Spring, MD  
Universata, Inc., Germantown, MD

**Maine**

HealthInfoNet, Manchester, ME

**Michigan**

Ann Arbor Area Health Information Exchange, LLC Ypsilanti, MI  
Greater Flint Health Coalition Regional Health Information Exchange Planning Project, Flint, MI  
Michigan Health Information Network (Michigan Department of Community Health and Michigan Department of Information Technology), Lansing, MI

**Minnesota**

Community Health Information Collaborative (CHIC- RHIO), Duluth, MN  
Minnesota e-Health Initiative, St. Paul, MN  
Minnesota Health Care Connection (MnCCC), Elk River, MN  
Minnesota Health Information Exchange (formerly MN eHealth Collaborative) St. Paul, MN  
University of Minnesota, MN

**Missouri**

CareEntrust (formerly Healthe Mid-America), Kansas City, MO  
KC CareLink Kansas City, MO  
Missouri Department of Health and Senior Services, Jefferson City, MO

**Mississippi**

Pegasus Subnetwork Organization, Jackson, MS

**Montana**

HealthShare, Helena, MT  
Montana Frontier Healthcare Network & Northwest EHR Collaborative, Inc., Anaconda, MT

**North Carolina**

NCHICA (North Carolina Healthcare Information and Communications Alliance, Inc.), Research Triangle Park, NC  
Southern Piedmont Health Information Exchange North Carolina Health Information Exchange, Kannapolis, NC  
WNC Data Link, Asheville, NC

**North Dakota**

North Dakota HIT Steering Committee, Grand Forks, ND

**Nebraska**

Western Nebraska Regional Health Information Exchange, Lincoln, NE

**New Hampshire**

New Hampshire Connects for Health: The NH Citizen's Health Initiative, Durham, NH

**New Mexico**

New Mexico Health Information Collaborative, Albuquerque, NM  
New Mexico Medical Review Association, Albuquerque, NM

**New York**

ARCHIE (Adirondack Regional Community Health Information Exchange), Gansevoort, NY  
Brooklyn Health Information Exchange Brooklyn, NY  
GRIPA Connect Clinical Integration, Rochester, NY  
New York Clinical Information Exchange (NYCLIX), New York, NY  
New York eHealth Collaborative, New York, NY  
The Bronx RHIO, Bronx, NY  
eHealth Network of Long Island (formerly The Center for Public Health and Health Policy Research), East Setauket, NY  
The Psychiatric Clinical Knowledge Enhancement System (PSYCKES), New York, NY  
The Greater Rochester RHIO, Rochester, NY

**Ohio**

Alcohol & Drug Addiction Services Board of Cuyahoga County, Cleveland, OH  
HealthBridge Cincinnati, OH  
HealthLink RHIO Wright State University Center for Healthy Communities, Dayton, OH  
Isthmus, Ltd. (Health Policy Institute of Ohio), Columbus, OH  
Northeast Ohio Regional Health Information Organization (NEO RHIO), Munroe Falls, OH

**Oklahoma**

SMRTNET - AHRQ grant Transforming Healthcare Quality through Information Technology, Tahlequah, OK

**Oregon**

Oregon & SW Washington Healthcare, Privacy & Security Forum, Portland, OR

**Pennsylvania**

Central Penn Health Information Collaborative (KeyHIE), Danville, PA  
Pennsylvania eHealth Initiative, Harrisburg, PA

**Puerto Rico**

Puerto Rico Health Information Network (PRHIN), San Juan, PR

**Rhode Island**

Blue Cross Blue Shield Rhode Island, Providence, RI  
Rhode Island Quality Institute, Providence, RI

**South Carolina**

Foothills Health Information Network Seneca, SC  
Electronic Health Network, LLC, Charleston, SC

**South Dakota**

South Dakota eHealth Collaborative, Pierre, SD

**Tennessee**

CareSpark, Kingsport, TN  
MidSouth eHealth Alliance, Nashville, TN  
Shared Health, Inc., Chattanooga, TN  
State of Tennessee Governor's eHealth Council, Nashville, TN

**Texas**

CriticalConnection, Inc., Austin, TX  
Indigent Care Collaboration, Austin, TX  
Texas Dept. of State Health Services, Austin, TX

**Virginia**

MedVirginia, Richmond, VA  
Northern Virginia Health Information Organization (NVRHIO), McLean, VA

**Vermont**

Vermont Information Technology Leaders, Montpelier, VT

**Washington**

eHI Works, Bellevue, WA  
Inland Northwest Health Services, Spokane, WA  
Whatcom Health Information Network, LLC, Bellingham, WA  
Washington State Health Care Authority (Health Record Banks project), Olympia, WA

**Wisconsin**

Marshfield Clinic TeleHealth, Marshfield, WI  
Wisconsin eHealth Initiative, Madison, WI  
Wisconsin Health Information Exchange, Mequon, WI

**West Virginia**

West Virginia Health Information Network, Charleston, WV

**Wyoming**

Wyoming Health Information Organization, Cheyenne, WY