

Health Information Exchange: Better Communication for Better Healthcare



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DHIN: Our Story



1997

- Legislation established DHIN under DE Healthcare Commission

2010

- Enabling legislation amended; DHIN is “an independent not-for-profit public instrumentality”

2005

- AHRQ Implementation Contract (\$4.7 M) awarded

2011

- New board, new management team

2007

- May 2007 Became operational with Results Delivery
- Data senders – 3 hospitals + Lab Corp
- Data receivers -5 physician practices

2012

- Explosive growth in participation and functionality
- Financial sustainability achieved

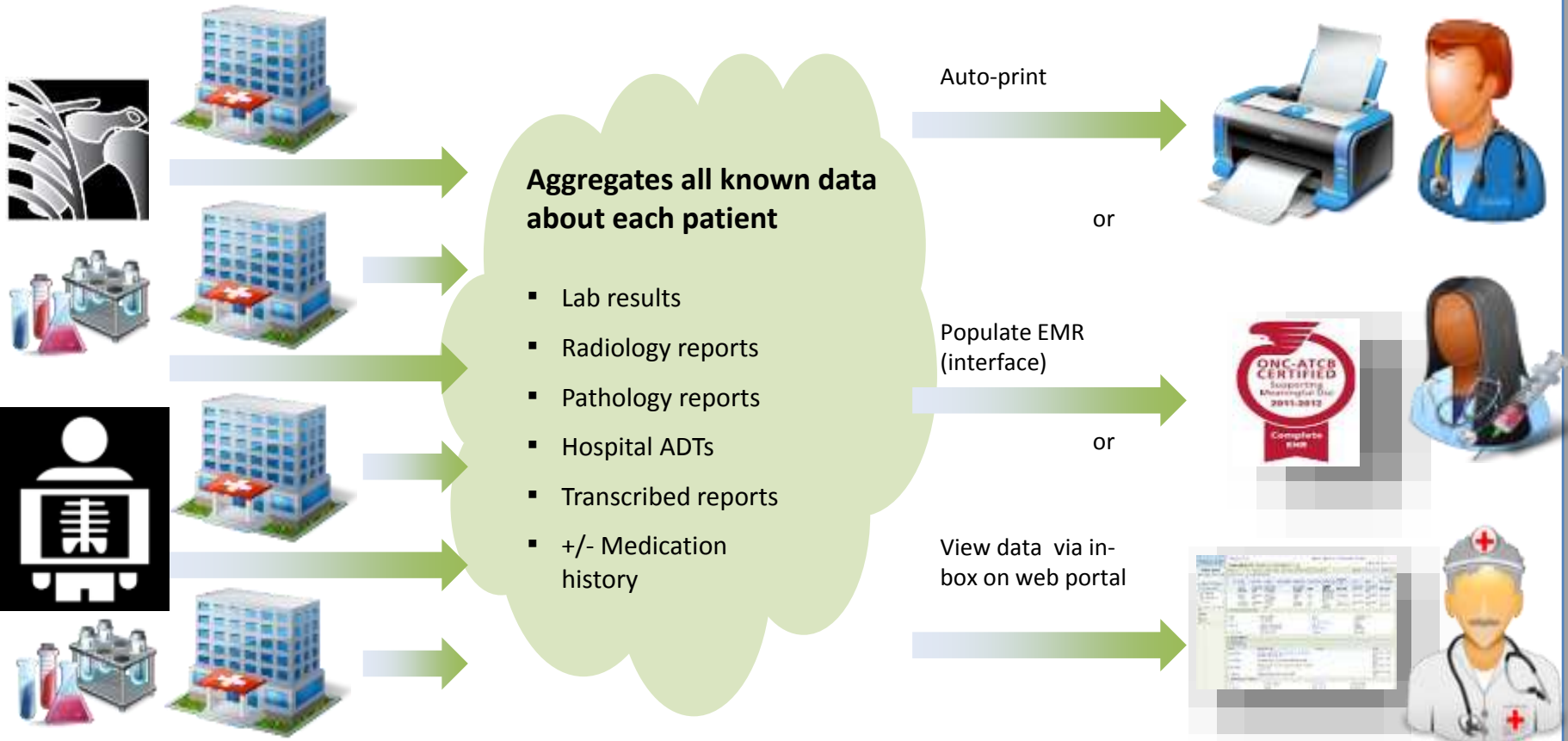
DHIN's Core Services:

Results Delivery and The Community Health Record

Data Senders

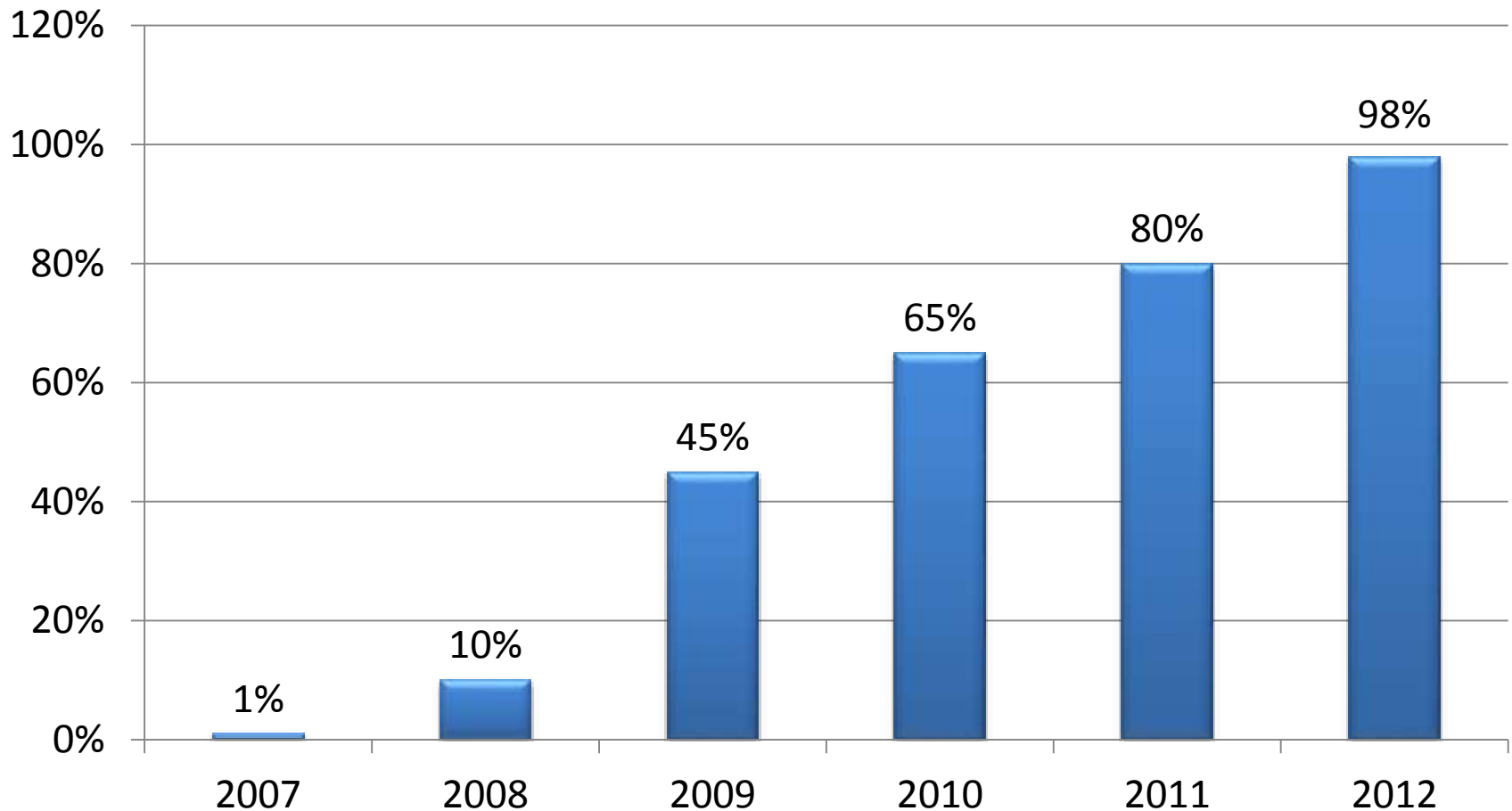
Community Health Record (can be queried)

Results Delivery



Growth of DHIN: Provider Adoption

(as a percent of Delaware healthcare ordering providers – Dec 2012)



Current Membership in DHIN

(as of Oct 2013)

- ✓ = in PROD
- = in CERT
- = Signed Agreement

★ Hospitals (100% + 2 out of state)

- ✓ All DE acute care hosp
- ✓ Atlantic General (MD)
- Union Hospital (MD)

Labs (~99% of results)

- ✓ Lab Corp
- ✓ Quest
- ✓ Drs Pathology Svcs
- ✓ Accu Reference Labs
- Med Labs Diagnostics (NJ)
- Mercy Diagnostic Labs (NJ)
- Public Health Lab

Radiology Groups

- ✓ (~95% of studies)

Health Plans (~43% of DE residents)

- ✓ Medicaid
- ✓ State Employees
- ✓ Highmark BCBS DE

CRISP (Maryland State HIE)

Pharmacies (IZ update)

- ✓ CVS
- Walmart
- Sav-On
- Walgreens
- Target

★ Providers (~98%)

★ FQHCs (100%)

★ Skilled Nursing (100%)

Assisted Living (80%)

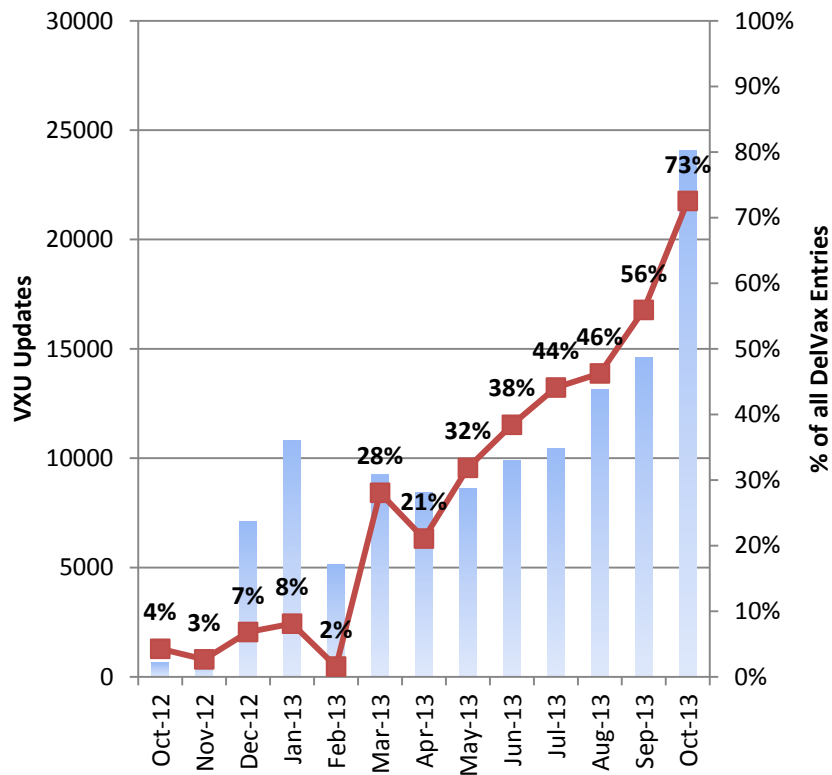
Home Health (4)

Hospice (3)

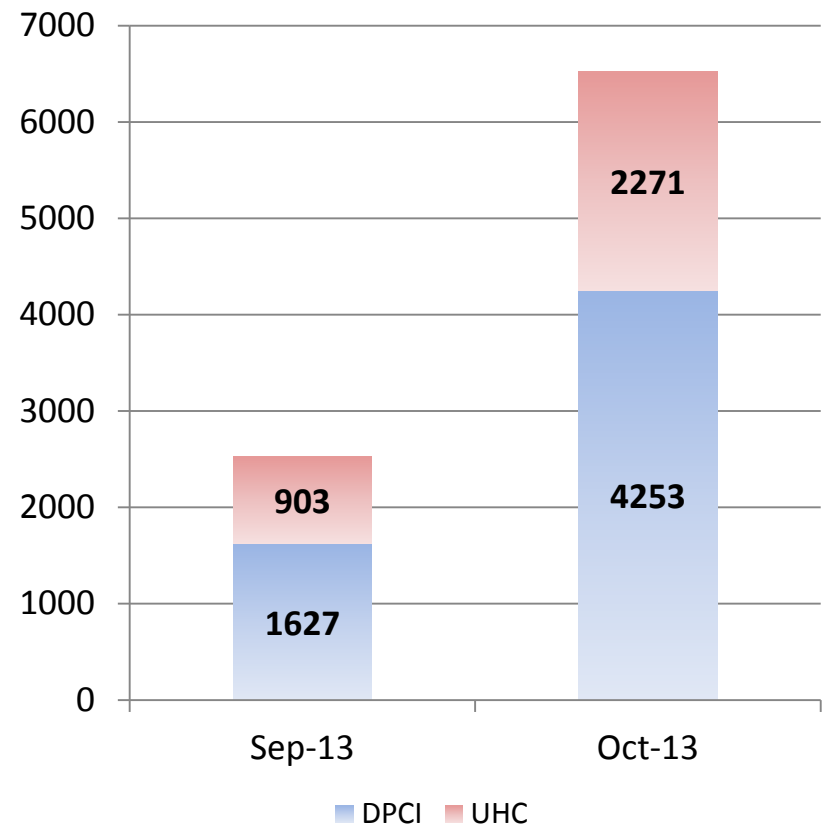
Division of Public Health

Adoption & Relevance: Other Views

DHIN-Facilitated Immunization Reporting



Event Notifications/Alerts



Cui Bono?

NOTE – “Meaningful Use” incentives not included in this analysis

Independent Third Party Evaluation from 2009-2011 showed...



Data Senders (hospitals, labs, etc)

Over \$2 million savings in costs of results delivery to providers who utilize DHIN



Providers/Practices

Estimated savings in EHR interface implementation costs of between \$18,500 and \$28,500 by each practice



Payers/Health Plans

Estimated 30-33% reduction in redundant ordering of high cost labs and radiology studies over 2 years

- \$6.5M savings based on Medicare reimbursement rates



Public Health

Real world outbreak of H1N1 flu detected in near real time



Patients

Numerous anecdotal reports

Other Benefit Studies

Humana study in Wisconsin showed average cost of insured patients' ER visits reduced by \$29 when HIE was queried – a more than 2:1 ROI

- Primary factor influencing reduction in cost believed to be the avoidance of redundant diagnostic testing
- Use of HIE also associated with reductions in inpatient days and length of stay of patients not admitted through the ER (a corollary effect of the use of HIE)



Source: Tzeel A. et al. (2012). "Hidden" Value: How Indirect Benefits of Health Information Exchange Further Promote Sustainability. *American Health & Drug Benefits*, (5)6, 333-341.

HIE Stages of Development



We are here:

2012

2007

2005

1997

Advanced HIEs

Stage 7: Innovating

- Sustainable and fully operational health information organization. Demonstration of expansion of organization to provide value-add services, such as advanced analytics, quality reporting, clinical decision support, PACs reporting, EMS services.

Stage 6: Sustaining

- Fully operational health information organization; transmitting data that is being used by healthcare stakeholders and have a sustainable business model.

Stage 5: Operating

- Fully operational health information organization; transmitting data that is being used by healthcare stakeholders.

Stage 4: Piloting

- Well under way with implementation—technical, financial and legal.

Stage 3: Planning

- Transferring vision, goals and objectives to tactics and business plan; defining your needs and requirements; securing funding.

Stage 2: Organizing

- Getting organized; defining shared vision, goals, and objectives; identifying funding sources, setting up legal and governance structures.

Stage 1: Starting

- Recognition of the need for health information exchange among multiple stakeholders in your state, region or community.

“The Once and Future DHIN”

Current Development

- Immunization reporting
- Event notification (health plans and practices)
- Care summary exchange
- Image viewing
- Newborn screening



Future Development


- Consumer-facing tools
- Expanded provider portal (payer-provider communications)
- All Payer Claims Database
- Clinical Quality Measure reporting
- Medical device data
- Analytics tools for population views and clinical research



Current Challenges

- Vendor capacity for added workload
- Sources of capital for future expansion (life after HITECH)
- HIPAA Omnibus – all participants are “spooked”
- Data ownership – much concern about secondary uses of data
- Framework for evaluation and selection of new opportunities and partnerships

Finishing the Puzzle...

A close-up photograph of a person's hand placing a single dark grey puzzle piece into a larger assembly of white puzzle pieces. The puzzle is laid out on a light-colored surface. The hand is positioned on the right side of the frame, with the thumb and index finger holding the dark piece. The white puzzle pieces are arranged in a grid-like pattern, with the dark piece fitting into a specific gap in the center. The lighting is bright, casting soft shadows.

***If it were easy,
anyone could do it!***