



Value of Health Information Exchange from the Payor's Perspective –

A Toolkit for HIE Leaders

October, 2013

Our Roadmap

Segment	Slide #
➤ Foundations	3
➤ Background	5
➤ Opportunities to Engage Payors: Success in the Field	9
➤ HIE from the Payor's Perspective: A Value Model	14
➤ Implementing the Value Model for Payors	23
➤ Footnotes and Resources	30

Foundations

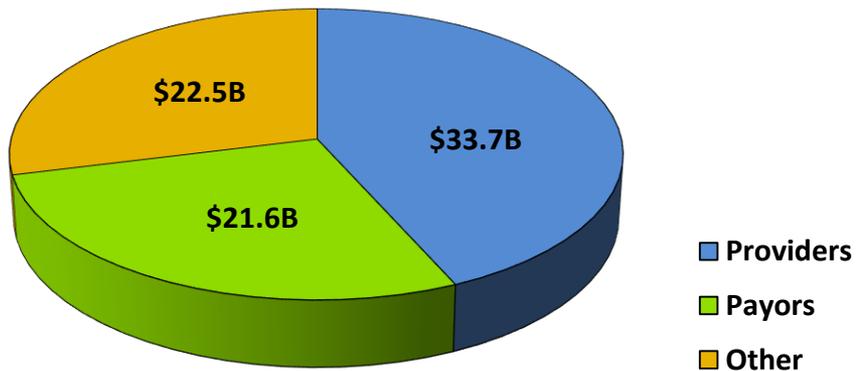


- To provide leaders of health information organizations¹ with a framework and evidence-based support to gain financial participation of payors in health information exchange
 - Toolkit can be used for:
 - Building a business case
 - Developing strategies aligning payors and providers
 - Implementing mechanisms to evaluate results

Background



Value of Health Information Exchange to Payors



Net value of "level 4" i.e., advanced HIE to key stakeholders²

- Payors have potential to derive ~1/3 of total net value of HIE services
- Successful RHIOs projecting 30% - 66% of revenues will be generated from payors^{3,4}
- Models in the literature do not adequately quantify benefits of improvement in quality & outcomes, suggesting additional upside to value realization by payors

Tangible Value of HIE across key stakeholders (1 of 2)

Value Proposition	Principal Beneficiaries		
	Payors	Healthcare Systems	Physician Organizations
Improve efficiency, controls, and analysis of referrals	✓		✓
Improve quality of information and streamline distribution of reporting for quality improvement programs	✓	✓	✓
Prevent avoidable inpatient admissions	✓	✓	
Reduce avoidable service utilization and costs associated with emergency department visits	✓	✓	
Reduce cost of distributing clinical reports to physicians <ul style="list-style-type: none"> Eliminate faxes, courier costs, and mail 		✓	

Tangible Value of HIE across key stakeholders (2 of 2)

Value Proposition	Principal Beneficiaries		
	Payors	Healthcare Systems	Physician Organizations
Reduce time spent collecting information at the point of emergency visit or inpatient admission		✓	✓
Reduce time spent via telephone inquiring on lab results			✓
Simplified and streamlined flow and presentation of a longitudinal EHR reduces time spent interpreting data from a variety of disparate sources	✓	✓	✓
Simplify and streamline medical and drug authorizations <ul style="list-style-type: none"> Reduce costs of exchanging clinical information needed for authorizations 	✓	✓	✓

Payors have a stake in most tangible benefits of Health Information Exchange

Opportunities to Engage Payors: Success in the Field



Anticipated reduction in health care costs: Greater Rochester RHIO



- **Area of focus:**
 - Avoid unnecessary tests and treatments with improved coordination of care by delivering a comprehensive virtual health record at the point of care
 - As relationship with payor participants has matured, RHIO is now working on connecting payors to receive hospitalization alerts and CCDs from providers
- **Nature of payor participation:**
 - Health insurers pay a “surcharge” in the form of a pre-determined fee added to each hospital discharge claim
 - Surcharge amount is based on projected discharges and the RHIO’s operating expenses, and is adjusted periodically ⁴
- **Value realized:**
 - GRRHIO in collaboration with its participants and an independent researcher is conducting studies to quantify cost savings using claims data⁵

The Greater Rochester RHIO engaged payors early by articulating a compelling, sharply focused business case and developing an innovative fee mechanism

Reducing unnecessary service utilization and costs: Wisconsin HIE



- **Area of focus:**
 - Reduce service utilization and costs associated with ER visits by encouraging clinicians to query a HIE for a patient’s medical history
- **Nature of payor participation:**
 - Humana provided WHIE with financial incentive to promote use of the HIE by clinicians in the Emergency Department.
 - Payment based on the number of queries conducted
 - Envisioned as an interim step toward a “shared savings” model whereby the HIE organization & providers would receive a portion of the savings realized by the health insurer⁶
- **Value realized:**
 - 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) ⁷

Although WHIE was subsumed into the state designated entity (WISHIN) since this pilot, it demonstrated a model that showed payor incentives to use HIE are associated with tangible savings

Improve clinical quality and health outcomes: Indiana HIE

Quality Health First. Program

Brought to you by:  Indiana Health Information Exchange



UNITEDHEALTH GROUP®

- **Area of focus:**

- Enable an effective quality improvement program by facilitating the delivery of data to physicians to aid in proactive chronic care management and preventive screening

- **Nature of payor participation:**

- A payor consortium supports the production of a standard set of reports sourced from IHIE's data repositories & based on a common set of quality measures
 - 2000 physicians participate in the program with quality measures for 1M+ members/patients tracked⁹
- IHIE receives a PMPM fee from the payors' for production & distribution of patient summaries to physicians & quality reporting to the payors⁸

- **Value realized:**

- Bonus payments to physicians due to improved quality increasing YOY
- Increase in the number of diabetic patients receiving appropriate follow-up care⁹

This program is a model for how competing health insurers can find common ground for collaborating in HIE for mutual benefit

Reduce cost & risk of exchanging clinical data: Nebraska Health Information Initiative

- **Area of focus:**

- Lower costs, improve timeliness and reliability, and mitigate security risks associated with the exchange of clinical data via facsimile and paper-based methods for medical and drug authorization and care management activities

- **Nature of payor participation:**

- BCBS NE an early participant (2005), provided seed capital and actively engaged in governance, business planning, etc.
- National plans beginning to engage as they resolve multi-state HIE concerns
- Health plans pay an annual fee plus a PMPY fee
- NeHII exploring the automatic “push” of transactions to payors based on specific events for the payors’ members

- **Value realized:**

- Reduced clinical data acquisition, access and disposal costs
- Improved ease of access to clinical data for payment

The early participation of BCBS Nebraska helped create a framework for working collaboratively with providers



Health Information Exchange from the Payor's Perspective: A Value Model



Birds-Eye View of Value of HIE to Payors



Quality & Outcomes

- More informed clinical decisions
- Improve continuity and coordination of care



Cost & Efficiency

- Reduce avoidable interventions and services
- Simplify and streamline administrative processes involving payor-provider communications



1. Reduce avoidable service utilization and costs associated with emergency room visits
2. Reduce avoidable admissions
3. Simplify and streamline medical and drug authorizations
4. Improve efficiency, controls, and analysis of referrals
5. Improve quality of information and streamline distribution of reporting for quality improvement programs

1. Reduce avoidable service utilization and costs associated with Emergency Room visits

- Query *comprehensive medical history* at the point of care in the ER
 - Highlight recent diagnostic testing & results

2. Reduce avoidable admissions

- Query *comprehensive medical history* at the point of care in the ER
- Reconcile medications at time of discharge
- Notify all providers caring for patient post-discharge
 - Includes discharge summary & medication list
- Access to patient's health record by post-discharge providers
 - e.g., PCP, home health, rehab

Measures

- Cost/ER visit
 - Frequency of top procedures:
 - Lab
 - Diagnostic Radiology
 - CT scans
 - Inpatient days*
 - Length of stay
-
- Frequency & Cost of Inpatient Admissions
 - Frequency of all-cause 30 day re-admissions

Mounting quantitative evidence of the importance of HIE to these “big cost levers”; It’s not a question of “if” but one of magnitude.

3. Simplify and streamline medical and drug authorizations

- Query HIE for clinical documentation required to review and authorize procedures or medication therapy
- Clinical documentation transmitted along with authorization request to payor using standard transaction set

4. Improve efficiency and controls of referrals

- CCD and other pertinent CDA documents submitted with referral request to health plan for authorization and consulting clinician
- Updated CCD and consultation report submitted by consulting clinician
- Alerts for non-compliance with care pathways and non-adherence with authorized procedures

Measures

- Administrative expense / medical necessity review
 - Administrative expense / prior authorization
 - Frequency of prescription abandonment
-
- Administrative expense / referral authorization
 - Frequency of out-of-network referrals
 - Authorized procedures not performed

5. Improve quality of information and streamline distribution of reporting for quality improvement programs

- HIE is the single source of comprehensive set of data for production of universal set of quality reporting to providers and payors
 - Claims and EHR data are normalized for consistent longitudinal and cross-section reporting
- All-payor quality reports use a standard set of quality measures

Measures

- Costs for compiling & distributing quality reports
- Variance from medical utilization & cost targets

Technology Considerations for Implementing HIE Services to Reduce Costs & Improve Efficiency

Value Proposition	Technology Considerations
1. Reduce avoidable service utilization and costs associated with Emergency Room visits	 
2. Prevent avoidable admissions	     
3. Simplify and streamline medical and drug authorizations	   
4. Improve efficiency and controls of referrals	  
5. Improve quality of information & streamline distribution of reporting for quality improvement programs	 

Key to Technology Considerations:

-  **Analytics**
-  **Decision Support**
- System-generated transactions
-  **CDA document support**
-  **EMPI & Provider Directory**
-  **Consumer connectivity**
-  **Event notification**
-  **Data repository**
-  **Workflow apps**



1. Enhance detection of contraindications to medication therapy, lab tests, and radiology procedures
2. More informed and proactive chronic care management and preventive screening programs
3. Better manage transitions of care

Payor investments in HIE services to improve quality and outcomes may qualify as “quality improvement expenses,” thereby improving the medical loss ratios of a payor’s health plans

1. Enhance detection of contraindications to medication therapy, lab tests, and radiology procedures

- Send alert to provider when a new prescription, test or procedure is detected that may be contraindicated
 - Meaningful and actionable because of the comprehensive virtual health record and timeliness of HIE

2. More informed, proactive chronic care management and preventive screening programs

- HIE is the most comprehensive data source to populate a clinical registry for use by clinicians to follow-up with patients not within quality guidelines
 - Shows gaps in care, risk level, recommended actions
 - Direct access to CCD and other relevant CDA documents

Measures*

- Frequency of adverse drug events
- NCQA:
 - Avoidance of antibiotics when contraindicated
 - Appropriate use of steroid injections

Measures*

- HEDIS:
 - Screening measures
 - Diabetes care measures
 - Controlling blood pressure

*Examples of measures. Select relevant quality measures that are the payor's priority

3. Better manage transitions of care

- Notify all providers caring for patient of new consultations and transfers of care
 - Facility admissions and discharges; activation, renewal or discontinuation of rehab, home health, etc.
 - Includes CCD & medication list
- Access to patient's health record by post-discharge providers
 - e.g., PCP, home health, rehab center

Measures*

- HEDIS:
 - All-cause readmissions
 - Care for older adults: medication review
- CAHPS:
 - Ease of getting needed care

*Examples of measures. Select relevant quality measures that are the payor's priority

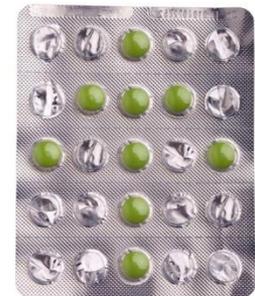
Technology Considerations for Implementing HIE Services to Improve Quality & Outcomes

Value Proposition	Technology Considerations
1. Enhance detection of contraindications to medication therapy, lab tests, and radiology procedures	    
2. More informed, proactive chronic care management and preventive screening programs	      
3. Better manage transitions of care	     

Key to Technology Considerations:

- | | |
|--|---|
|  Analytics |  Decision Support |
|  CDA document support | - System-generated transactions |
|  Consumer connectivity |  EMPI & Provider Directory |
|  Data repository |  Event notification |
| |  Workflow apps |

Implementing the Value Model for Payors



Horizon 3 - “Achieving the vision of collaboration between the state’s payors and providers – to improve quality and reduce costs of health care”

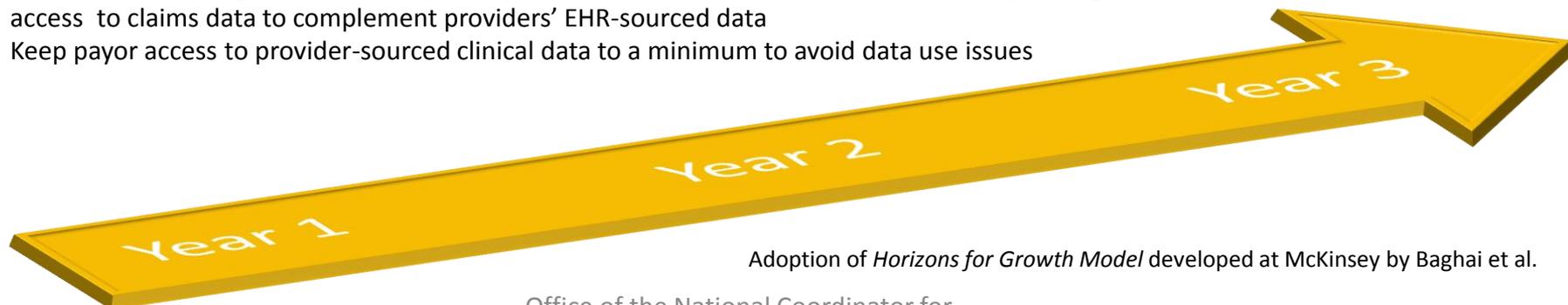
- All major payors are participants of the state’s HIE at the state and sub-state levels
- HIE services to improve quality and outcomes are the principal strategic focus of development
- HIE services available to providers in previously “white space” areas to maximize coverage

Horizon 2 - “Build on Early Success”

- Drive scale and reduce cost of HIE services by pursuing as broad a multi-payor solution as possible
- Expand HIE services to include payor access to clinical data that are key to quality improvement and measurement in accordance with federal, state and local policy parameters
- Support rigorous studies to measure the value of HIE services realized by payors and their provider networks

Horizon 1 - “Lay the Foundation for Payor Support”

- Start with HIE services to reduce costs and improve efficiency; benefits realizable in the near-term
- Get state agency administering Medicaid on-board
- Focus on maximizing breadth and depth of patient health records available via the HIE by having access to claims data to complement providers’ EHR-sourced data
- Keep payor access to provider-sourced clinical data to a minimum to avoid data use issues



Adoption of Horizons for Growth Model developed at McKinsey by Baghai et al.

Strategies for Implementing the HIE Value Model for Payors (1 of 2)

- **Treat as a *dynamic* model with value propositions that can be used selectively**
 - Choose and prioritize value propositions:
 - With a focus on a narrow set of data exchange services that are clearly aligned with the payor's and key provider participants' cost & efficiency and/or quality & outcomes strategic priorities
 - With measures matching the collaborating organizations' capabilities for tracking data
 - Ensure the resources and mechanisms are in place from the onset to measure & verify benefits of HIE services
 - Frequently update value propositions and measures using findings from the field
- **Engage senior-level Medical Directors of the payor organizations early in the process**
 - These individuals usually have broad responsibilities for improving quality and controlling medical expenses
 - Medical Directors often take the lead in their organizations for leveraging health information technology to improve quality

Health Information Organization leaders should be active contributors of regional and state collaborative quality programs. Demonstrating the value of HIE in advancing the vision and goals of these quality initiatives will get the attention of medical directors at payor organizations

Strategies for Implementing the HIE Value Model for Payors (2 of 2)

- **Procure a commitment from the state agency administering Medicaid as early as possible**
 - Commitment of Medicaid officials validates the HIE organization's services and the value propositions of importance to the program
 - Availability of Medicaid beneficiaries data to the HIE strengthens all value propositions defined in this model
- **Use federal and state legislation and policy as levers**
 - Monitor state legislative activities regarding mandates for health insurer involvement in HIE and certified EHR initiatives (e.g., Vermont)
- **State-level HIO mission and model determine role in engaging payors and fostering creation of value for payors using HIE**

State-level HIOs: Role in engaging payors and potential impact

Public Utility Model¹⁰

All roles of the Elevator and Capacity-builder & Orchestrator models plus:

- Implement HIE services where scale reduces cost of HIE for the end-user (e.g., medical & drug authorization services, universal quality reporting, clinical decision support for contraindications)
- Provide data aggregation services to support health analytics (including normalization of data)
- Collaborate with payors to connect members/consumers

Capacity-builder & Orchestrator Models

All roles of the Elevator model plus:

- Promote state-level shared services to advance payors' value propositions and reduce cost of HIE at the sub-state level (e.g., Universal quality reporting, standardized authorization services)
- Connect sub-state nodes to enhance value for payors with large market share across the state and needing broad member coverage to make HIE scale meaningful

Elevator Model

- Promote services to realize value in areas of interest to both providers and payors (e.g., transition of care notifications)
- Marketing & Education to promote value of HIE to payors
- Leverage state-level resources to foster alignment of payors and sub-state HIE participants' goals

Impact

High

Low

Examples using different approaches

Change in ED visit costs when
HIE services are used

Net change in ED claims costs for year

members * (HIE fee PMPM¹¹ * 12)

Optimizing the Medical Loss
Ratio

(Incurred claim expenses) +
(Activities to improve healthcare
quality – non-HIT) +
(HIE service fees to improve
healthcare quality)

Earned premium revenue

- Identify additional opportunities for HIOs to create value for payors as...
 - Breadth and depth of patient health information available via HIE increases
 - Payors are directly connected to the HIE
 - Accountable Care Organizations evolve and look to HIOs for infrastructure support
- HIOs need to take the lead and collaborate with key HIE stakeholders to accumulate empirical evidence of the value of HIE along the dimensions of cost & efficiency and quality & outcomes

- (1) HIO (Health Information Organization): “An organization that manages governance and deployment of coordinated HIE services for exchange of PHI among clinical entities. Collaborative HIOs encompass multiple clinical entities across legal entities or arrangements. Enterprise HIOs provide such services within a legal entity (like an IDN) or trading arrangement (such as an OHCA or organized health care arrangement).” – ONC, 2011 . Retrieved from: http://www.nationalehealth.org/sites/default/files/onc_state_hie_strategic_and_operational_plan_models_full_study-feb_2011.pdf
- (2) Walker et al. (2005). The Value Of Health Care Information Exchange And Interoperability. Health Affairs. Retrieved from: http://www.partners.org/cird/pdfs/CITL_HIEI_Report.pdf
- (3) Indiana Health Information Exchange (2009). Nationwide Health Information Network (NHIN) Trial Implementations: Task 9 Deliverable: Jurisdiction-Specific Business Plan
- (4) National eHealth Collaborative (2011). Secrets of HIE success revealed: Lessons from the leaders. Available at: <http://nationalehealth.org/SecretsofHIESuccessRevealed.pdf>
- (5) Kremer, T. (2011). Rochester RHIO committee develops revenue plan to cover \$3 million annual operating cost. Health Management Technology. Retrieved from: <http://www.healthmgttech.com/ebook/201109/resources/a20.htm>
- (6) Tzeel, A. et al. (2011). The business case for payer support of a community based health information exchange: A Humana pilot evaluating its effectiveness in cost control for plan members seeking emergency department care. American Health & Drug Benefits, 4 (4), 207-216. [Study of Humana members seen in EDs connected to the Wisconsin Health Information Exchange] Retrieved from: <http://www.ahdbonline.com/feature/business-case-payer-support-community-based-health-information-exchange-humana-pilot-evaluat>
- (7) 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.
- (8) Indiana Health Information Exchange (2010). Annual Report
- (9) IHIE Quality Health First Website (2013) Available at: <http://www.ihie.org/>
- (10) Office of the National Coordinator for HIT (2011 Feb 16) State HIE strategic and operational plan emerging models
- (11) Use per member per month as the metric to account for fluctuations in covered members. PMPM fees are ranging between \$0.12 and \$1.00 depending on the HIE services provided

Value of Health Information Exchange from the Payor's Perspective – a Toolkit for HIE Leaders

Prepared by:

Michael Solomon, Ph.D., Point-of-Care Partners

William Hein, Point-of-Care Partners

www.pocp.com

and Tom Davidson

Deloitte Consulting LLP

www.deloitte.com

The authors thank the following individuals for their input:

-Deb Bass, Nebraska Health Information Initiative

-Ted Kremer, Greater Rochester RHIO

-Albert Tzeel, M.D., Humana