Examples

of

Health Information Exchanges

for

HITSAC

July 30, 2009

Vermont Information Technology Leaders (VITL)

a. Organization
    i. A non-profit partnership between the public and private sectors
b. Governance
    i. Initially, board consisted of 21 directors and enabled the group to achieve buy-in from a large number of stakeholders; now, board has 11 directors
    ii. Board-level advisory committees for health care providers and consumers have been created. These committees are chaired by a VITL board member, who is responsible for presenting recommendations of the advisors to the full board for consideration
c. Services
    i. Current Data Exchange Transactions
        1. Laboratory, radiology, chronic disease data (pilot project), and medication history (pilot project)
    ii. Planned Data Exchange Transactions
        1. Continuity of care documents, e-prescribing
d. Start-up Financing
    i. $2.1M from VT legislature; $2M from VT Dept. of Health; $1M from community stakeholders
e. Operating Expenses
    i. Staff, rent, electric bills, and professional development ~$1.5M/year
f. Ongoing Revenue
    i. Legislatively mandated funding from VT businesses and members of public at 0.199 percent of medical claims. Projected to raise $32M over 7 years.
g. Architecture
    i. Basing HIE operations on HITSP specifications. Communicate and store clinical data using CDA documents (e.g., CCD).
    ii. Store data in an XDS registry/repository.
    iii. Communicate data using HL7 version 2.x messages.
    iv. Transmit data to a chronic disease registry which uses an SQL database.

2. Indiana Health Information Exchange

a. Organization
    i. A non-profit organization
b. Governance
    i. Board of directors
c. Services
    i. Current Data Exchange Transactions
        1. Longitudinal results review, clinical messaging, syndrome surveillance (PHESS), electronic lab reporting public health
        2. Clinical quality measurement/reporting which includes the following: laboratory, pathology, radiology, EKG reports, transcriptions, emergency department information, hospital encounter information, medication history, discharge summaries, allergies/immunization, tumor registry, medication/prescription records, ambulatory appointment data, claims processing, prescription (dispensing evaluation)
    ii. Planned Data Exchange Transactions
        1. Medication reconciliation, secondary uses of data (i.e., research)
d. Start-up Financing
    i. Investments from federal and state governments, Regenstrief Institute, eHealth Initiative, and Anthem BCBS; $1.8M Biocrossroads; $2M Fairbanks Foundation
e. Operating Expenses

IHIE's Financial Forecast -- 2008 through 2012

IHIE's Operating Revenue	2008	2009	2010	2011	2012
Revenue from Services to Health Systems					
Clinical Messaging / INPC Services Bundle	$3,100,000	$5,200,000	$7,300,000	$9,100,000	$9,900,000
Future Value-Added Service Revenue	$0	$0	$250,000	$350,000	$500,000
Revenue from Services to Health Plans					
Quality Health First® Revenue	$2,000,000	$2,500,000	$3,000,000	$3,500,000	$4,000,000
Future Value-Added Service Revenue	$0	$0	$250,000	$350,000	$500,000
Total ►	$5,100,000	$7,700,000	$10,800,000	$13,300,000	$14,900,000
IHIE's Operating Expense*	**2008**	**2009**	**2010**	**2011**	**2012**
Data Center and Hardware	$130,000	$200,000	$225,000	$240,000	$270,000
Software	$600,000	$850,000	$1,100,000	$1,300,000	$1,475,000
Database Setup and Maintenance	$375,000	$550,000	$730,000	$840,000	$940,000
Interfaces and Data Mapping	$2,700,000	$4,000,000	$5,350,000	$6,120,000	$6,835,000
Customer Training and Support	$1,330,000	$1,900,000	$2,600,000	$2,960,000	$3,300,000
Project Management	$175,000	$250,000	$325,000	$360,000	$400,000
Professional / Legal Services	$90,000	$150,000	$170,000	$180,000	$200,000
New Service Development	$255,000	$385,000	$540,000	$665,000	$745,000
Total ►	$5,655,000	$8,285,000	$11,040,000	$12,665,000	$14,165,000
IHIE's Other Funding Sources	**2008**	**2009**	**2010**	**2011**	**2012**
Other Funding Sources (e.g. Grants)	$500,000	$500,000	$500,000	$0	$0
Contribution to Cash Reserves ►	-$55,000	-$85,000	$260,000	$635,000	$735,0

f. Ongoing Revenue
   i. $.17 - .37 per transaction fee for distribution of results by labs (clinical messaging, volume-based sliding scale); $.30 PMPM by insurance companies for quality reports; no fees for clinician access to data

3. Delaware Health Information Network

a. Organization
    i. A membership organization and public-private partnership between the state and healthcare providers.
b. Governance
    i. Has a board of directors which represents various community and professional factions; a consumer advisory committee that includes broad representation ranging from the public health community to political, consumer, faith-based, healthcare and clinical bodies; a project management team has representation from all of the data contributors and technology support personnel.
c. Services
    i. Current Data Exchange Transactions
        1. Laboratory, radiology, pathology, admission discharge and transfer information, face sheets (including demographic data), Forwarding of reports and results for referral and consult
    ii. Planned Data Exchange Transactions
        1. Transcribed reports, medication history, enhanced operational reporting, lab order entry and PACS radiology images
        2. Plans to implement an EMR 'Primer' by mid-2010. Functionality of the EMR Primer will include enhanced referrals and consults, ePrescribing, eOrder entry, eSignature, and P4P analytics.
d. Start-up Financing
    i. $5M from state of DE ($2M in year 1 and $3M in year 2); $2M match from private sector (year 1); $4.7M from AHRQ SRD grant
e. Operating Expenses
    i. Unavailable
f. Ongoing Revenue
    i. Private stakeholders/data providers charged on volume of transactions. Costs are allocated as a percentage of total costs to the state authority; PMPM fee for health plans; subscription fee for value-added services to be implemented.

4. Inland Northwest Health Services

a. Organization
    i. A non-profit organization, owned by two competing hospitals in Spokane, WA.
b. Governance
    i. A five member executive team (CEO, CFO, CIO, etc.) with an eight member board of directors that represents hospital owners (including physicians) and community members.
    ii. Three other groups advise the organization:
        1. Inland Northwest Community Health Project – provides input on the tools they would like to see developed, data they believe should be emphasized, and other social and cultural issues of community
        2. City-Wide Health Information Group – involved in the privacy and security of data management and exchange
        3. *Occasionally*, organization convenes with consumer groups working with Chamber of Commerce
c. Services
    i. Current Data Exchange Transactions
        1. Inpatient and outpatient pharmacy transactions, inpatient and outpatient laboratory orders and results
        2. ER admissions
        3. Inpatient documentation, including diagnoses and treatment
        4. Administrative (billing, etc.)
    ii. Planned Data Exchange Transactions
        1. Ambulatory pharmacy transactions
        2. Long-term care
        3. Consumer access to their health information
d. Start-up Financing
    i. Initial investments from two hospital systems (unspecified amts.)
e. Operating Expenses
    i. Unavailable
f. Ongoing Revenue
    i. Uses a service fee sustainability model to fund the exchange. Users contract for a particular service and pay for initial implementation and an ongoing operational support fee.

5. The Hudson Valley Health Information Exchange

a. Organization
   i. Two organizations support the exchange:
      1. Taconic Health Information Network Community (THINC) – which is a non-profit regional health information organization
      2. MedAllies – which is a for-profit company that manages and operates the exchange

b. Governance
   i. The exchange has a 7 member board of directors and five committees; the committees are Privacy and Consumer, Security and Technology, Quality and Clinical, Public Health, and Finance.

c. Services
   i. Current Data Exchange Transactions
      1. Hospital data
      2. Laboratory data
   ii. Planned Data Exchange Transactions
      1. Public health reporting
      2. Quality reporting
      3. Medication data

d. Start-up Financing
   i. $1M stakeholder investments (2001); $100K eHealth Initiative, Connecting Communities for Better Health; $235K IBM/ONC grant (2005); $5M HealNY state grant; $12.1M HealNY for Public Health reporting (2008).

e. Operating Expenses
   i. Unavailable

f. Ongoing Revenue
   i. $400/month subscription fee for EMR implementation, support, and access to electronic orders (lab order entry; half offset by grants until pay for performance incentives begin
   ii. $72K per hospital interface maintenance