

Statewide Connectivity of Health Information Technology (HIT)

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AHRQ State Demonstration Project

- “Support statewide data sharing and interoperability activities aimed at improving the quality safety, efficiency and effectiveness of health care for patients and populations on a discrete state or regional level.”
- 1 million dollars per year for five years

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AHRQ Deliverables

- Identify core clinical data elements and core health care entities (data sharing partners)
- Convene a Technical Advisory Panel
- End of year one: 25 % data exchange (of core data elements between core health care entities)
- End of year two: 50% data exchange
- End of year three: 100% data exchange
- Year 4 and 5 - data exchange beyond core data elements and core health care entities,
- Year 4 and 5- demonstrate measurable improvements as a result of data exchange and interoperability

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Goal of State HIT Demo Project

- Create, implement and evaluate a Master Patient Index as the backbone of an interconnected information system putting the right information into the hands of clinicians and their patients when and where it is needed.

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Master Patient Index

- Central demographic database
- Stores unique patient identifiers of data sharing partners
- Requires unique patient master “key”
- Requires unique provider identifier “key”
- Requires data sharing partners to have secure connection
- Could serve as single authentication portal to data sharing partners information

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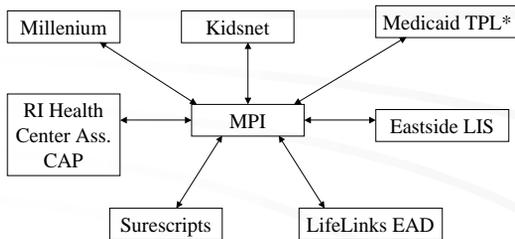
Approach

- Phase 1- MPI created and could serve as single portal to provide access to each data sharing partner’s data
- Phase 2- Common interface developed so patient information presented in a unified, logical manner, add other data sharing partners
- Phase 3- include decision support, add other data sharing partners, develop warehouse for population health analysis

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Initial Data Sharing Systems of the Master Patient Index (MPI)



* Initially, the Medicaid TPL system will participate in the MPI for evaluation purposes only.

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Initial MPI Data Sharing Partners

- HEALTH's KIDSNET
- HEALTH's Millenium- clinical laboratory system
- Lifespan's Lifelinks
- SureScripts - electronic information exchange between physicians and pharmacies;
- Rhode Island Health Center Association's patient registry and data warehouse
- East Side Clinical Laboratory's web-based reporting system
- Medicaid's Third party Liability , TPL (evaluation only)

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AHRQ Funding Supports:

- Designing and building of the MPI and its connectivity
- Provider input, awareness, & training,
- Consumer input awareness and enrollment
- Advisory Panel
- Intensive Evaluation
- Minimal Staffing at HEALTH

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AHRQ Funding Does Not Support:

- Purchase of EHR's
- Cost to implement EHR's
- Modifications to data sharing partners systems to link to the MPI

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5 Components of MPI Project

- Technical Assistance and Coordination and with other Health Information Technology (HIT) efforts within the state (RIQI)
- Technical design and development of the MPI (TBD);
- Health care provider engagement, training and participation (QPRI);
- Consumer education and engagement (Subcontractor TBD);
- Well-defined and rigorous evaluation (Brown University)

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Technical Assistance And Coordination With Other Statewide HIT efforts .

Subcontractor-Rhode Island Quality Institute

- Administer The Advisory Panel (TAP)
- Assure strong coordination between MPI project with other state wide HIT efforts and RIQI committees

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Technical design and development of the MPI;

Proposed subcontractor-TBD

- Identify clinical process needs (business needs/ high level requirements)
- Identify appropriate design (architecture) based on requirements
- Hire an IT Vendor
- Build and implement MPI

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Health Care Provider Engagement, Training and Participation;

Subcontractor- Quality Partners of RI

- Seek provider input in design
- Train providers
- Assist with implementation, workflow redesign
- Assist with evaluation of provider use

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Consumer Education and Engagement;

Proposed subcontractor-TBD

- Solicit vendor
- Literature review
- Consumer input- intercept interviews (willingness to enroll, type of technology for key, where/how to enroll)
- Partner with QPRI- provider input to enrollment
- Materials development and Marketing
- Obtain feedback, modify , evaluate

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Evaluation

Subcontractor- Brown University

Qualitative:

- Technical development and connectivity
- Accuracy of patient identification (Matching)
- Provider Participation (with QPRI)
- Consumer Participation (with consumer vendor)

Quantitative:

- Identify indicators, metrics and methods eg. Medical errors, ER admissions, adverse drug reactions, repeat diagnostics, administrative (less time looking for results)

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Activities to Date:

Stakeholder Meetings: To identify needs for a system that will be useful, usable and used

- Informational meeting
- Needs Identification Workshop (2 meetings: mixed group, and care givers)
- Discussion re models for architecture

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Feedback received:

Ease of Use:

- input , viewing, training,
- standards based,
- adaptable to workflow,
- accessible

Security/Privacy/confidentiality:

- authentication and access,
- multiple mechanisms for access access with different users in mind,
- proxy issues,
- accountability for accuracy

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Feedback received:

System accessibility and reliability:

- variety of access modes,
- Flexibility: integrate with existing systems
- leverage web,
- neutral platform & technology,
- minimum access & response time,
- access if system goes down,
- able to customize defaults etc,
- certification of data sources,
- ? Patient direct access

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Feedback received:

Data related needs:

- accurate, consistent, reliable,
- uniform data definitions,
- consistent/standardized presentation and reports but user specific (by medical specialty),
- standardized test reports,
- very close to real time availability,
- robust unique identifier,
- provide added value: labs, pharmacy, ER discharge summary and referral, other treating physicians (specialists),
- ability to self populate
- identify who submitted data, audit trails

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Feedback received:

Organizational/Practice infrastructure:

- not duplicate data entry,
- links to billing/administrative systems,
- primary care focused,
- build on existing workflow and technical systems requirements,
- still support legacy systems,
- need to access information for print including previous information,
- technical support,
- affordable,
- incentives to use

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Activities to Date:

Proposed Core Data Element Categories:

- Childhood Health: lead, newborn screening, newborn hearing, immunizations
- Laboratory: Clinical Lab tests
- Pharmacy: Prescription medications
- Utilization: Hospitalization, ER use, ambulatory use
- Allergies: medication only

Future Data enhancements: all allergies, other relevant clinical data such as HT, Wgt., BP, etc., adult immunizations

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Next Steps:

- Finalize Governance Structure
- Develop Detailed Project Plan
- Begin obtain more detailed requirements
- Obtain consumer vendor- LOI
- Decide on architecture
- Develop Technical Solicitation

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