

GREATER HOUSTON HEALTH INFORMATION EXCHANGE

Amendment to Business
and Operating Plan
December 6, 2011

2. COMMUNITY VALUE DETAILS

Further describe local health care goals being pursued including targets and metrics.

As a rapidly growing and ethnically diverse region, the Greater Houston area faces numerous public health challenges. Over the past 10 years, a great deal of community and public effort has been devoted to ameliorating these problems. Public health goals for the greater Houston area have been articulated by multiple civic and community based organizations, on many levels. *Healthy People 2010*, which identifies key national community health indicators and associated objectives, has provided an important foundation for various assessments and initiatives in the state, county and municipal arenas.

GHHIE looks forward to supporting the achievement of Houston area public health goals by providing more complete, accurate, and timely information to public health agencies, participating providers, health plans, employers, and ultimately, individuals. At its core, the greatest value of a robust health information exchange will be realized from the ability to better coordinate care for individuals, as well as from the capacity to rapidly identify and respond to emerging public health trends.

LOCAL PUBLIC HEALTH PRIORITIES

In 2004, the Greater Houston Partnership (GHP) spearheaded a City of Houston Public Health Task Force. This task force produced a seminal report that ultimately served as the catalyst for founding GHHIE. In their assessment, the task force identified a number of critical public health problems which could be more effectively addressed with the help of a comprehensive and real-time public health information system. Recognizing this need, the Center for Houston's Future and the Harris County Healthcare Alliance collaborated to launch the GHHIE, funded by a federal planning grant, administered through the TDHHS and THSA. Between 2005 and 2009, a consortium of collaborating health agencies and organizations has periodically produced broad assessments of the state of health in Houston and Harris County and linked identifiable public health objectives to the national initiative, *Healthy People 2010*.

The State of Health in Houston and Harris County 2009 identifies four major health outcome categories for public health action: Maternal and child health, chronic disease, communicable diseases and access to health services. Specific targeted areas that GHHIE can begin supporting upon implementation of the network are described below:

1. Reducing Inappropriate Use of Emergency Departments

The GHP *City of Houston Public Health Task Force Report* identified the inappropriate overuse of emergency room services as a key public health priority. The report's findings not only pointed out the widespread overuse of emergency services, but also illuminated an expensive and inefficient system of hidden subsidization, in which providers are forced to recoup the cost of uninsured care by passing on those costs to taxpayers, private insurance companies, and ultimately, employers.

This concern was reiterated in *The State of Health in Houston and Harris County* in 2009. The consortium's report cites a study conducted by researchers at the Center for Health Services Research at UTSPH which indicated that over 30% of all emergency visits in Houston are either non-emergent, or emergent, but primary care treatable.

By transmitting timely information regarding patients' preexisting conditions and prior emergency department use, GHHIE can assist hospitals to triage care for patients who would be more appropriately served in a non-emergent setting. This ability to better coordinate care will reduce overall expenditures on emergency services, thereby freeing-up health care dollars to be re-appropriated to primary care settings. Based on recent HIE studies in other markets, additional cost savings will likely be accrued by avoiding unnecessary testing for patients who are treated in the emergency departments.

2. Improving Surveillance and Management of Communicable Diseases

The spread of communicable disease is an ongoing concern in the Houston community due to a number of factors, including climate, significant immigration from other countries, and economic conditions for populations at risk.

The Houston Department of Health and Human Services is working to address those issues and has begun implementation of an E-labs reporting system, which provides for electronic reporting of all reportable diseases from ten public health and community hospital labs to the Bureau of Epidemiology. This ensures 100% or nearly 100% reporting of all such cases tested by those laboratories, and will reduce errors from manual data entry. This system will enable more effective public health intervention by pinpointing loci of infection, leading to targeted public health initiatives to limit the spread of diseases in the community.

GHHIE's network will offer a complement to the existing E-labs system, expanding its reach to include a broader range of laboratory participation. GHHIE can also facilitate similar disease surveillance measures in other county health departments within the 14-county GHHIE service, for which e-lab reporting software has not yet been acquired.

By creating a more robust network and broader connectivity, GHHIE can help to provide more complete information about the incidence of communicable diseases, which will in turn improve the timeliness of disease investigations and intervention.

3. Decreasing Healthcare System Costs by Identifying Duplicative and Unnecessary Testing

The GHP *Public Health Task Force Report* also highlights the significant financial impact of duplicative testing that results from the lack of a single unified health record. When patients see multiple providers about the same or related clinical events, testing is often repeated unnecessarily.

GHHIE will offer providers access to a more complete health history, thereby supporting the elimination of unnecessary testing, prescribing and procedures.

4. Collaborating to Combat Chronic Disease and Underlying Health Determinants.

Health People 2010 specifically identifies diabetes, arthritis and asthma as three primary chronic diseases for concerted public health intervention. The WHO also recently declared diabetes as a worldwide health concern of epidemic proportion.

To combat chronic diseases at the community level, The Houston Department of Health and Human Services (HDHHS) was recently awarded a Community Transformation Grant from the Centers for Disease Control and Prevention (CDC) to help tackle those chronic diseases that lead to seven out of 10 Houston-area deaths.

To provide further support, numerous philanthropic organizations are contributing grants to local initiatives involved in combating childhood obesity, a leading contributor to chronic disease in adulthood.

GHHIE can play a valuable role in supporting public health initiatives to address chronic disease and their underlying determinants in numerous ways. The network will enable providers, health plans and employer-based health programs to better plan interventions together, while also empowering individuals to participate in the management of their own health. By providing access to critical health information, and creating linkages for healthy social and support systems, GHHIE expects to play a growing role in chronic disease prevention in Houston.

5. Enhanced Coordination of Mental Health Services

The Health Policy Institute at UT Health, School of Public Health recently released results from the *2010 Health of Houston Survey*. This survey relies on population-based self-reporting of health status. In addition to underscoring the previously mentioned public health issues that GHHIE hopes to support, this survey highlights the ongoing concern surrounding mental health in the greater Houston community.

The survey reported that serious psychological distress affects 7 % of residents, which is twice the national rate. The use of prescription drugs for mental health problems occurs in 10% of the adult population here. Of those people reporting an unmet need for mental healthcare, 60% said that cost was a significant barrier. With limited access to mental health services, residents are more likely to use emergency departments to obtain the care they need.

By providing access to historical patient information, GHHIE will assist providers in the emergency department to more appropriately treat patients with mental health needs. In addition, GHHIE can help providers offer more well-informed coordination of services, and make appropriate referrals to public centers for mental health treatment.

REFERENCES

- 1) Healthy People 2010 http://www.cdc.gov/nchs/healthy_people/hp2010/hp2010_indicators.htm
- 2) The Declaration for Health: Texas State Strategic Health Plan, Part III, 2003
www.dshs.state.tx.us/cpcpi/docs/legacydocs/sshpdeclarationforhealth3.pdf
- 3) The State of Health in Houston and Harris County 2009 http://hchalliance.org/filelib/FileCabinet/pdfs/The_Houston_State_of_Health_2009.pdf
- 4) Public Health Task Force Report: Greater Houston Partnership
<http://www.hchalliance.org/filelib/FileCabinet/pdfs/PublicHealthTaskForceReport.pdf>
- 5) Houston Hospitals Emergency Department Use Study (2009 update): UT Health, School of Public Health, Center for Health Services Research
http://www.sph.uth.tmc.edu/uploadedFiles/Redesign_Website/Research/Research_Centers/Center_for_Health_Services_Research/HSRC/Final2009BegleyMonday.pdf
- 6) The Health of Houston Survey 2010: UT Health, School of Public Health, Institute for Health Policy
<http://www.sph.uth.tmc.edu/hhs2010/>

III. IDENTIFICATION AND MITIGATION OF RISKS

Expand risks and mitigation plan to fully address risks associated with privacy and security, technical implementation, and data integrity.

Risk	Mitigation
Privacy and Security	
Transmission of data without patient authorization	Develop and require participants to use standard authorization language for “opt-in-all” PHI disclosure; conduct audits to ensure authorizations have been obtained
Inappropriate access of PHI by HIE and/or participants including workforce and business associates	Use role-based access to authenticate users prior to access; require participants to train workforce and business associates regarding access policies; implement event logging to create audit trail of all access events; implement triggers to flag potentially inappropriate access events; and conduct regular and special audits of access events by GHHIE and participants.
Reliance on vendors for privacy or security management	Ensure vendor contracts require adherence to state, federal and GHHIE privacy and security requirements; require vendors to provide workforce training regarding requirements; periodically audit vendors’ adherence to requirements
Technical Implementation	
Diverse technical platforms of participants will delay/complicate implementation	Select a vendor with broad experience with connecting/interfacing with multiple EMRs. Establish required specifications for participation/interfacing with stakeholders and emphasize standardized approach and customer resources as entry requirement
Vendor will have multiple customer implementations and unable to focus on GHHIE implementation	Recognize that selecting a first tier vendor will make this a likely challenge. Use the contracting process to incentivize/penalize vendor related to meeting commitments. Select a 3 rd part integrator with experience with the vendor selected to provide a safety net if vendor resources appear to be less seasoned than required. Focus on milestones and be the squeaky wheel early and loudly.
Vendor will be unable to deliver contracted technology per deadlines	GHHIE will not be requesting functionality in the first 2 phases that has not been widely implemented so should not be waiting on new code; therefore the focus is on keeping a tight schedule with constant communication.
Data Integrity	
Diverse platforms feeding the HIE increase the risk of data integrity challenges	GHHIE is beginning with exchange only and will not be storing clinical data at inception. Policies addressing transaction monitoring and audit logs will be developed with the vendors and will take advantage of customer base best practices. Participants in RFI development and selection process have experience with Enterprise HIEs and have scrutinized functionality related to securing data; identifying incidences, and resolving/addressing any issues. User compliance has been an area of focus as the conversations concerning participation agreements have begun. Policies and Procedures along with a “Trust but Verify” approach and selection of a strong vendor will be the foundations of the mitigation strategies

TIMELINE AND WORK PLAN

Include a detailed project plan outlining the timeline for essential activities that specifies how services will be available by January 2012 – see *attachment*

Clearly indicate which services will be available by specific dates

Direct Project Services will be available December 2011- January 2012

Use Cases will be demonstrated via Direct Project Services January 2012 – June 2012

Patient Portal will be available 1st Q 2012 (pending contract execution)

Basic HIE Services will be available 2nd Q 2012

Value-Add Services will be available as requested beginning July 2012

Describe if and how the Direct protocol will be used in the interim to support Meaningful Use requirements

Greater Houston HIE will begin offering Direct Project Services to the 14 county service area in December 2011. GHHIE has multiple options for the Direct Project that indicate they can meet the timeline. Demonstration of the value of this service offering will be communicated via a press release and website alert.

First users will be a major specialist group connecting with a Primary Care group to enroll with the GHHIE Direct Project Services and to develop a more efficient referral process.

GHHIE will assist Physicians with meeting a core requirement of MU: Perform at least one test of the EHR's capacity to exchange information electronically with another provider or authorized entity.

PROJECT PLAN ATTACHMENT

GHHIE Project Plan

Category	Task	Start	Finish
Organizational	Select & finalize PEO	Dec-11	Jan-12
	Recruit and onboard staff	Dec-11	Feb-12
	Identify & finalize office space	Dec-11	Feb-12
	Finalize Insurance	Dec-11	Jan-12
Privacy & Security	With stakeholders, develop and finalize standard language for policies, qualified organization/participant agreements, and patient authorization	Sep-11	Jan-12
	Obtain Board approval		Jan-12
Compliance	Statements of Interest submission		Quarterly
	Report of Provider Outreach		Quarterly
	BOP Updates		Quarterly
	Respond to SOI Audits		Quarterly
Direct Project	Conduct interim Direct Project Services provider selection	Nov-11	Dec-11
	Obtain Approval		Dec-11
	Select First Providers		Dec-11
	Implement Direct	Dec-11	Jan-12
Use Case Deployment via Direct Project	Select first 2 Hospitals	Dec-12	Jan-12
	Execute agreements		Jan-12
	Develop implementation timeline		Jan-12
	Implement	Dec-12	Jan-12
	Record Results	Jan-12	Mar-12
	Communicate	Mar-12	Mar-12
	Enroll additional participants	Mar-12	Continuous
	Select Hospital and EMS group	Dec-12	Jan-12
	Execute agreements		Jan-12
	Develop implementation timeline		Jan-12
	Implement		Feb-12
	Record Results	Feb-12	Jun-12
	Communicate		Jun-12
	Enroll additional participants	Jun-12	Continuous
	Select Medicaid HP and Hospital	Dec-12	Feb-12
	Execute agreements		Feb-12
	Develop implementation timeline	Dec-12	Feb-12
	Implement		Feb-12
	Record Results	Feb-12	Apr-12
	Communicate		May-12
Enroll additional participants	May-12	Continuous	

GHHIE Project Plan

Category	Task	Start	Finish
Technical Partner	Obtain Board approval of Technical Partner	Dec-11	Jan-12
	Conduct vendor negotiation	Dec-11	Jan-12
	Obtain Board approval to sign contract		Jan-12
	Develop Implementation timeline		Jan-12
	Implement	Jan-12	Oct-12
System Integrator	Distribute RFIs		Dec-11
	Obtain Board approval of Partner	Dec-11	Jan-12
	Conduct negotiation		Jan-12
	Obtain Board approval to sign contract		Jan-12
HIE Solution Services Rollout	Secure clinical messaging integrated w/Project Services	Apr-12	May-12
	CCD Exchange between EMRs	May-12	TBD
	e-Prescription facilitation	May-12	TBD
	Medication History via Surescripts	May-12	TBD
	Lab Results Routing	May-12	TBD
	Patient Centric Physician Portal	May-12	TBD
	Consumer Empowerment	May-12	May-12
	Rad/Image Sharing	May-12	Jul-12
	Lab Results Reporting to PHA	May-12	Jul-12
	EMR-lite	May-12	Jul-12
	Eligibility Exchange w/Payers	May-12	Jul-12
	Quality Reporting	As requested by participants	
	Data Aggregation for Analysis		
	Disease Surveillance		
Workflow Tools			
Outreach, Education & Enrollment	Solicit letters of interest from Hospitals and Physicians to meet THSA requirements	Feb-11	Continuous
	Educate community on value of HIE services and educate through committees and groups	May-11	Continuous
	- Patient Advisory Committee	Sep-11	Continuous
	- Payer Forums	Oct-11	Continuous
	- Employer Forums	Dec-11	Continuous
	- Center for Houston's Future	Jun-11	Continuous
	-Small and Rural Hospital Advisory	Jan-12	Continuous
	-Medical Societies and Staffs	May-11	Continuous
	- Harris County Healthcare Alliance	Continuous	
Communications	Finalize Marketing Strategy		Dec-11
	Create Press Release		Dec-11
	Create New Patient Centric Website		Dec-11
	Develop Marketing Materials	Continuous	
	Develop & Implement Media Plan	Continuous	
	Develop Programs to create community awareness	Continuous	
	Develop opportunities for local match	Continuous	
	Finalize new name, logo, & timeline		Dec-11
	Develop Branded Patient Portal	Jan-12	Feb-12
	Integrate Patient Portal into HIE SW Solution	Apr-12	May-12