

The Integrated Care Collaboration
Local HIE Grant Program
Amendment 1 to Revised Business and Operational Plan

Submitted to:

Texas Health Services Authority

And

Texas Health and Human Services Commission

September 20, 2011

The following items shall amend the Revised Business and Operational Plan of the Integrated Care Collaboration that was submitted to the Texas Health Services Authority and Texas Health and Human Services Commission on July 28, 2011.

Board Composition

The Integrated Care Collaboration (ICC) has completed additions to the HIE Governing Board to comply with the composition requirements outlined in the RFA to ensure the state's desired oversight of the health information exchange. The new HIE Governing Board members include*:

Board Member Name	Position	Representing
Larry Wallace	Chief Service Delivery Officer, Central Health	Consumer
Sarah Churchill	SVP, Strategic Development, HIPAA Privacy expert	Consumer
Dr. Tamarah Duperval-Brownlee	CMO, Lone Star Circle of Care	Physician
Dr. David Rameriz	CMO, Seton Medical Centers of Austin	Physician
John Mason	CIO, St. David's Hospitals	Hospital
Steve Conti	Director of Disease Management, Seton Healthcare	Hospital
Anthony Jones	Account Manager, Quest Laboratories	Laboratory
Corbin Ferrell	Director of Pharmacy, Lone Star Circle of Care	Pharmacy
Chris Hartle	SVP of Insurance Services and Managed Care, Seton Health Plan	Health Plan
Rolland Valle	Director of Hospital Contracting Provider Network Services, Amerigroup	Health Plan
Carl Angel	Executive Director, ICC	HIE

* Previous reports included Kenneth Placke from ATCIC as a Board member representing Consumers. Mr. Placke has since left ATCIC, and because the Board already has 2 consumer representatives, it was decided not to replace Mr. Placke at this time.

The expanded HIE Governing Board has scheduled its initial meeting for either September 26, 2011 or October 4, 2011. Schedules are still being coordinated due to displacement of several Board members by the recent wildfires in Central Texas. The agenda for the Board meeting has been set as follows:

- Welcome and Introductions – Carl Angel, ICC Executive Director
- Local HIE Grant Program – Pete Perialas, ICC Finance and IT Committee Chairman
- HIE Governing Board Purpose and Goals – Carl Angel and Kem McClelland, Counsel and Business Development
 - Governance
 - Consent Policy
 - Participation Agreements
 - Other ICC Data Sharing Policies and Agreements
- Demonstration of ICare 2.0 Platform – Katey Brown, ICC Director of Communications and Maurice Samuels, CSSS Chief Technology Officer
- Demonstration of ICare Direct – Katey Brown and Maurice Samuels
- Adjourn

Risks and Mitigation

	IMPACT HML	MITIGATION STRATEGY
Privacy and Security		
Inability to effectively communicate security best practices and subsequently to enforce use of such best practices.	H	Develop substantial training materials and program to be used by HIE implementers during on-boarding of new hospitals and physicians.
Increased security event management complexity as participation in the HIE increases.	H	Implement an adaptive security appliance to monitor who and what type of data is being accessed.
Increased scope and complexity of personal health information (PHI) access monitoring.	H	Implement event logging at an application, network and user level to aide in the enforcement of privacy and security policies. Conduct regular internal audits of users and activities impacting the HIE data environment. Conduct a third party security audit of the HIE operating environment. Ensure limited administrative access in all instances of HIE. Define, design, implement and rigorously enforce role-based access to user interface components of HIE. Ensure substantially similar security solutions applied to analytic and data warehousing components of HIE.

Technical		
<p>Migration of data from the existing ICare system to the redesigned ICare platform not completed on time.</p>	<p>H</p>	<p>Ensure meaningful understanding of legacy data, including scope, format, relationships and limitations.</p> <p>Ensure ability to receive and store realtime messages and batch files from participants during migration and initial “shake out” of redesigned platform (store and forwarding procedure currently in use).</p> <p>Ensure architecture facilitates multiple test environments and performance of multiple test iterations for data conversion validation.</p>
<p>Redesigned ICare platform will not be robust enough to handle increased scope and complexity of the HIE.</p>	<p>L</p>	<p>Ensure rigorous analysis requirements and testing.</p> <p>Ensure decoupled, componentized solution with robust API.</p> <p>Ensure scalable hardware, network and operating system architecture. Employ virtualization technology to achieve efficient and rapid scalability.</p> <p>Stay abreast of alternative solutions for all components.</p> <p>Carefully monitor system performance and usability as system use and data volume increases.</p>
<p>Development and implementation of interfaces required to connect all new participants in the HIE does not occur in a timely manner.</p>	<p>H</p>	<p>Manage participant expectations.</p> <p>Developing a set of reusable, customizable interfaces for most widely deployed electronic medical record systems and internal HIE systems to shorten interface development time.</p> <p>Maintain rigorous scope control.</p> <p>Utilize Direct solution on interim basis while completing standard interfaces.</p>
<p>Project resource requirements underestimated and/or scope is significantly changed.</p>	<p>H</p>	<p>Rigorous scope control.</p> <p>Employ intelligent resource loading methodologies.</p> <p>Maintain contractual relationships with multiple technical consulting and contracting firms for rapid staff augmentation when needed.</p>
Governance		
<p>New participants will want revisions to policies and regulating</p>	<p>L</p>	<p>Review existing policies and solicit input on potential changes from expanded HIE Governing</p>

documents related to participation in and use of data from the HIE.		Board.
Goals of original existing HIE participants conflict with goals of new participants.	M	Manage expectations of both existing and new participants. Robust education and outreach program. Carefully manage implementation of functionality and services to balance needs of existing and new participants.
Goals and requirements of Local HIE Grant Program conflict with goals of existing HIE.	M	Manage expectations of both existing and new participants. Robust education and outreach program. Employ creative and flexible governance structure to ensure that HIE meets the needs of all stakeholders.
Sustainability		
Difficulty in expanding contribution-based sustainability model to expanded region and participants.	L	Explore alternative sustainability models for years beyond intended functional life of current model. Develop additional revenue streams.
Pricing models hinder adoption. Pricing models are economically unsustainable.		Understand market, demand, and price elasticity for HIE services. Ensure flexibility of pricing model and adapt as needed to drive adoption. Balance needs of community versus sustainability of HIE.
Miscellaneous		
Physicians and hospitals are confused by: a. overlapping HIE regions under the Local HIE Grant, b. the distinction between a regional HIE and other forms of HIE, and c. various health information technologies.	H	Fine tune outreach and educational materials and presentations based on feedback from hospitals and physicians. Work with statewide and regional organizations to coordinate educational efforts.
Behavioral health providers want to participate in health information exchange, but both the providers and the HIE face additional complexity and challenges due to Federal and state privacy regulations (particularly where patient consent not available).	M	Ensure new platform provides capabilities to limit visibility of sensitive PHI by source and provider.
Physicians who are not pursuing Meaningful Use incentives are	H	Create additional educational and outreach materials highlighting the benefits of HIE beyond

<p>apathetic about joining the local HIE.</p>		<p>achieving MU requirements</p>
<p>Users of Direct HIE not incentivized to invest in structured data interfaces (standard HIE services).</p>		<p>Educate users on advantages of participating in standard HIE services.</p> <p>Develop and implement strategies that leverage Direct participation into more sophisticated health information exchange.</p> <p>Develop incentives to encourage participation in standard HIE services (financial, clinical, etc.).</p> <p>Actively participate in industry and federal efforts related to EHR-to-Direct protocol.</p>

Evaluation Plan

1. Approach to evaluation and assessment:

The Integrated Care Collaboration (ICC) has significant experience measuring results based on both specific “use cases” for data exchange, and on targeted interventions that address gaps identified by data analyses. The ICC’s research and evaluation team has established a methodology for both external and internal evaluations that use rigorous scientific methodology and relevant health information exchange (HIE) data for measuring the impact of care coordination and related ICC-developed programs.

The ICC has defined a set of measurable programmatic, community, population, and patient-centric goals for its expanded HIE operations and a corresponding methodology for evaluation of the HIE. The HIE evaluation will assess the extent to which the HIE is fulfilling its objectives of the planning, development, and operations of a regional HIE in the Central Texas Region. The ICC’s research and evaluation team review existing literature to identify indicators of success and to set achievable targets when developing plans for evaluation of the ICC-coordinated HIE. Interactions between humans (patients and providers), technology (HIE systems and security), and organizations (clinics, hospitals, health departments, etc.) are evaluated covering technical, professional, organizational, economic, ethical and legal domains.

Evaluation of the HIE incorporates clinical, technical, and survey data. The ICare database provides a rich source of data for longitudinal evaluation of patient utilization and clinical outcomes across the healthcare continuum. Technical information is available on use and utilization statistics as well as safety and security. Survey data is used to determine the satisfaction of users with the HIE.

Evaluation

The primary goal of the Integrated Care Collaboration (ICC) is to create a region-wide health information exchange that is trusted and valued by all stakeholders, resulting in improved care coordination and a foundation for sustainability. Below is a chart detailing the ICC's goals, strategies, outcomes, indicators of success, and data collection methods for this project.

Goal	Activities/Strategies	Outcomes	Indicators of Success	Specific Success Targets (End of Grant Period)	Data Collection Method
<p>Create a region-wide health information exchange that is trusted and valued by all stakeholders, resulting in improved care coordination and a foundation for sustainability</p>	<p>Develop, design, implement, and educate users/systems on ICare 2.0.</p> <p>Conduct satisfaction surveys among users/systems of ICare.</p> <p>Measure clinical outcomes for patients in CentrEast region.</p>	<p>Complete HIE coverage of patients residing in CentrEast Region.</p> <p>Improve satisfaction and utilization of HIE in CentrEast Region.</p> <p>Improved clinical outcomes for patients in the CentrEast Region.</p>	<p>1.1 Substantial increase in the number of participants in the ICare HIE and facilitate the electronic exchange of patient care summaries across unaffiliated organizations.</p> <p>1.2 Increase provider utilization of ICare HIE.</p> <p>1.3 Increase provider satisfaction of ICare HIE.</p> <p>1.4 Increase satisfaction of HIE amongst non-clinician stakeholders and data consumers (i.e. public health department, analysts, member organizations, county staff, REC, universities, etc.).</p> <p>1.5 Facilitate the continuous improvement of clinical outcome measurement.</p> <p>1.6 Increase the percentage of records that have complete data.</p>	<p><u>1.1: Participant increase:</u> Increase hospital and physician recruitment to 55 hospitals and 4,295 physicians.</p> <p><u>1.2: Provider utilization:</u> Increase the percent of providers who have signed a letter of intent, have registered for an HIE account, and have accessed the system at least one time in previous quarter to 45%.</p> <p><u>1.3: Provider satisfaction:</u> Increase the percent of providers who report overall satisfaction with the HIE as favorable to 80%.</p> <p><u>1.4: Stakeholder satisfaction:</u> Increase the percent of stakeholders who report overall satisfaction with the HIE as favorable to 70%.</p> <p><u>1.5: CI of Clinical Outcomes:</u> Significantly decrease average length of stay for patients on general medicine wards by 5%. Develop data cubes in the HIE reporting system for at least 2 HEDIS measures per quarter.</p> <p><u>1.6: Complete Records:</u> Ensure that 100% of records contain complete data for the following variables: unique ID, name, date of birth, address, sex, and ICD-9 code.</p>	<p>Data from ICare system</p> <p>Satisfaction surveys</p>

Goal	Activities/Strategies	Outcomes	Indicators of Success	Specific Success Targets (End of Grant Period)	Data Collection Method
				Increase the percentage of records with stated payor information to 95%. Increase the percentage of records with stated race/ethnicity to 75%. Increase the percentage of records with stated social security number to 60%.	
Provide cost savings for the ICC's service area by reducing redundant clinical tests and reporting	Develop, design, implement, and educate users/systems on ICare 2.0. Encourage Computerized Physician Order Entry (CPOE) exchanges between systems. Perform cost savings analysis.	Facilitate reportable conditions reporting to public health departments. Facilitate electronic laboratory ordering and result delivery. Provide cost savings by reducing redundant lab tests.	2.1 Significantly increase the percent of reportable conditions that are reported electronically to local health departments 2.2 Increase number of systems who submit data on laboratory results through Computerized Physician Order Entry (CPOE) 2.3 Decrease the number of redundant lab tests	<u>2.1: Reportable conditions:</u> Develop algorithms to identify 100% of the reportable conditions mandated by the Texas Department of State Health Services for providers submitting data through the HIE. <u>2.2: CPOE data submission:</u> Increase the percent of EMRs that support CPOE data submission to 50%. <u>2.3: Redundant lab tests:</u> Decrease the number of lab tests by 15%.	Data from ICare system Survey data of EMR systems Data from health departments
Increase the trust of consumers, patients, and providers in health information exchange by ensuring strong privacy and security safeguards are applied to all data in ICare	Employ strong authentication control methods, multi-factor authentication and unique user identification{HIPAA 164.312(a)(2)(i)} Use of multiple access control methods to enforce principle of "least privilege" Establish security posture baseline via internal and external risk assessment/audit	Confidentiality, integrity and availability of Personal health information is maintained in accordance with federal laws, state laws and patient expectations. Minimize inappropriate and unauthorized use of personal health information. Overall trust and confidence in the health information exchange system by patients and	3.1 Access has been limited to only those individuals and processes that require it complete job functions. 3.2 Passing results on all internal and external security and privacy audits 3.3 Decreased number of internal alerts received and substantiated by technical staff 3.4 Reduced risk of unintended data exposure and misuse.	<u>3.0. Gap Analysis:</u> Conduct privacy/security policy gap analysis to ensure all aspects of operating environment and data handling are addressed. Policy gap analysis to be completed by Q2 2012 <u>3.1. Access Policies and Procedures:</u> Develop set of robust, written policies to address who can access PHI and under what conditions/for what purposes. To be completed and presented to Board for approval during Q1 and Q2 2012 Board meetings. <u>3.2. Security and Privacy Audits:</u> 100% of all deficiencies identified in a	Data from the ICare system Internal and independent audit of control systems Review of internal system logs, change logs, automated reporting tools, access control lists and password files Employee

Goal	Activities/Strategies	Outcomes	Indicators of Success	Specific Success Targets (End of Grant Period)	Data Collection Method
	<p>Ensure all PHI data is encrypted in transit and at rest.</p> <p>Ongoing employee security and privacy training program.</p>	<p>providers is increased.</p> <p>Increase awareness of information security and privacy concerns and reinforce proper data handling methods.</p>		<p>security audit resolved at time of audit or with corrective plan to address findings. No more than 30% to be addressed with a corrective plan.</p> <p><u>3.3. Internal Alerts:</u> 30% reduction in redundant or false positive internal alerts. Baseline to be set in Q1 2012.</p> <p><u>3.4. Reduce Risk of Unintentional Breach:</u> 100% of employees with access to PHI have completed HIPAA privacy and security training. Establish annual privacy and security training program refresher for all employees to be implemented in Q1 2012</p>	<p>training records or training completion certificates</p>
<p>Empower consumers to actively manage their own health by providing access to their health information through an easily accessible and understandable patient portal</p>	<p>Design patient portal in consultation with subject matter experts.</p> <p>Pilot test, refine, and implement patient portal.</p> <p>Educate users/systems on patient portal.</p> <p>Measure patient satisfaction with patient portal.</p>	<p>Patients at any educational level are able to access and use the patient portal.</p> <p>Patients are able to understand the information presented through the patient portal.</p> <p>Patients become more actively engaged in their own health as a result of having access to and control of their personal health information through the patient portal.</p>	<p>4.1 Develop a patient portal that is easy to navigate and is appropriate for various patient educational levels and potentially available in Spanish as well.</p> <p>4.2 Increase patient utilization of patient portal.</p> <p>4.3 Increase patient satisfaction with the patient portal.</p>	<p><u>4.1: Patient portal navigation:</u> Develop a patient portal that 75% of patients identify as being easy to navigate and is readable at a 10th grade level.</p> <p><u>4.2: Patient portal utilization:</u> Increase the percent of adult patients who have an established medical home (as determined by the ICC definition) who access the patient portal at least one time in previous quarter to 20%.</p> <p><u>4.3: Patient portal satisfaction:</u> Increase the percent of adult patients who have an established medical home (as determined by the ICC definition) who report overall satisfaction with the patient portal as favorable to 80%.</p>	<p>Data from ICare system</p> <p>Satisfaction surveys</p>