

KC-BHIE Work Group: Services and Finance Deliverables

BACKGROUND DESCRIPTION OF MODEL: FUTURE STATE ELECTRONIC HEALTH INFORMATION EXCHANGE ECOSYSTEM

Service Consumer Base and Fee Structure						
Patient/ Consumer/ Caregiver	"Eligible"/ Direct Care Providers	Ancillary Service Providers	Business Intelligence Service Consumers	Contributing Stakeholders	Employers	Other
<p>Start of required service: Φ^N Significant Target of Service where N is the year when the service is initially available to the customer, if N is not included the service is anticipated but has not yet completed a detail market analysis and technical design;</p>						
<p>Fee Structure for Service: \$ (method) Financial considerations. A subscription would include a periodic payment that might be scaled based on volume. A transaction fee would be assigned to each occurrence of the service will scale oriented incremental fees. Fee for service is a negotiated, task oriented fee. Grant is fees derived from a foundation, state or federal agency.</p>						

Example transaction fee – Utah Health Information Network – payers click charge ~\$0.012 per transaction; providers annual charge ~ \$0.004 per transaction based on 70% benefit to payer and 30% to provider



KANSAS CITY BI-STATE HEALTH INFORMATION EXCHANGE (KC BHIE)

Common Services					
1. Personal Health	2. Point of Care	3. Administrative	4. Quality	5. Public Health	6. Research
<ul style="list-style-type: none"> a. Services that support care by the patient or a caregiver in a patient centric environment. b. Services that offer greater support for preventative care models while maintaining the transition from acute models. c. Models of consent and security that support substantial personal control. 	<ul style="list-style-type: none"> a. Services that focus on the myriad of care giving environments (e.g., hospital, long term care, etc.) and range of timing demands (e.g., realtime to periodic). b. Services that enable and facilitate a system of care among providers who offer care to the same patient. c. Services that provide a longitudinal view of a patient as well offer historical and familial context. d. Data used in these services come from diverse settings and controlled environments including an individual's home or environmental surroundings and to specific healthcare organizations. 	<ul style="list-style-type: none"> a. Services that support greater efficiencies by facilitating identity management and system coordination. b. Services that support awareness of the status of particular healthcare activities and/or past activities that benefit current services. 	<ul style="list-style-type: none"> a. Services that describe quality at various health interested organizations and as compared to appropriate peer groups. b. Services that facilitate required reporting or data submissions. c. Services that support flexible analysis of quality and efficiency data. d. Pushing or pulling data services that enhance decision making at all levels of the care continuum and within a community. 	<ul style="list-style-type: none"> a. Services that automatically push data to appropriate agencies and health interested organizations and individuals. b. Services that communicate public health descriptions as a byproduct to the activities of clinical messaging or care coordination. c. Services that support collection of data across a broad timing spectrum. d. Services that support data use that crosses all domains that impact community health as well as timely decision making. 	<ul style="list-style-type: none"> a. Services that support discovery of new techniques and technologies. b. Services that describe the care coordination process and the impact of system changes.

Core Services			
Data	Consumer	User and Subject Identity	Management
<p>Fundamental services that are typical of an HIE. Basic data access layer along with services to insure security, integrity and identity management. As a result of earlier work on the NHIN along with work in successful HIEs a service oriented architecture was described in a report by Gartner. The focus of these services is on the fundamental data and transaction requirements of KC BHIE's consumer and does not focus on value added services.</p>			
<p>based on Gartner classification in Summary of the NHIN Prototype Architecture Contracts, May 2007, see Technical Workgroup and/or Technical Design for final details.</p>			

Knowledge Repository and Transaction Routing	Meaningful EHR Use Requirements Met
<ul style="list-style-type: none"> 1. Identifies the data elements and data structures that make up KC BHIE's repository. 2. Operational transaction that are offered to customers of KC BHIE and that result in additions to or use of the repository. 	<p>List and/or description of federal Meaningful EHR Use requirements targeted by a particular phase of development</p>

Φ^N Significant Target of Service where N is the year when the service is initially available to the customer, if N is not included the service is anticipated but has not yet completed a detail market analysis and technical design;
 \$ (method) Financial considerations. A subscription would include a periodic payment that might be scaled based on volume. A transaction fee would be assigned to each occurrence of the service will scale oriented incremental fees. Fee for service is a negotiated, task oriented fee. Grant is fees derived from a foundation, state or federal agency.

KC-BHIE Work Group: Services and Finance Deliverables
PHASE 1: FUTURE STATE ELECTRONIC HEALTH INFORMATION EXCHANGE ECOSYSTEM

Service Consumer Base and Fee Structure							
	Patient/ Consumer/ Caregiver	Direct (including HITECH Eligible) Care Providers	Ancillary Service Providers	Business Intelligence Service Consumers	Contributing Stakeholders	Employers	Other
2c		Φ ¹ \$ 100 to 200 per month (subscription)					
2b		Φ ¹ \$ (tiered level of subscription most likely based on inpatient admissions or outpatient episodes)					
1a, 1b, 2a, 2d, 2f, 3b	Φ ¹ \$ (subscription and/or employer tiered fee structure similar to CareEntrust)	Φ ¹ \$ (tiered level of subscription most likely based on inpatient admissions or outpatient episodes)	Φ ¹ \$ (tiered level of subscription most likely based on volume, e.g., number of tests)				
2e, 5a		Φ ¹ \$ (subscription)		Φ ¹ \$ (subscription)			
3a		Φ ¹ \$ (tiered level of subscription most likely based on volume)					

Example transaction fee – Utah Health Information Network – payers click charge ~\$0.012 per transaction; providers annual charge ~ \$0.004 per transaction based on 70% benefit to payer and 30% to provider



KANSAS CITY BI-STATE HEALTH INFORMATION EXCHANGE (KC BHIE)

Common Services					
1. Personal Health	2. Point of Care	3. Administrative	4. Quality	5. Public Health	6. Research
a. Identity and consent management. b. Support management of baseline demographics, active medications/allergies, advanced directives, smoking status, family medical history and current problems.	a. Identity management. b. To exchange of episode based clinical summary, including problem list, medication list, allergies and test results. c. EHR Basic (certified), including e-prescribing including drug interaction, active medications/allergies. d. From exchange patient's recent provider history. e. From exchange patient specific and aggregate chronic conditions from problem list. f. From exchange as authorized provide patient demographics, current medication list, allergies, advanced directives, smoking status, family medical history.	a. Status of claims submission. b. Insurance eligibility (most likely through state HIE)		a. Aggregate chronic conditions from problem list.	

KC-BHIE Work Group: Services and Finance Deliverables

Core Services			
Data	Consumer	User and Subject Identity	Management
<ol style="list-style-type: none"> Secure data delivery, and confirmation of delivery, to EHRs, PHRs, other systems and networks Data look-up, retrieval and data location registries Support for notification of the availability of new or updated data Subject-data matching capabilities Summary patient record exchange Data integrity and non-repudiation checking Audit logging and error handling for data access and exchange Support for secondary use of clinical data including data provisioning and distribution of data transmission parameters Data anonymization and re-identification as well as HIPAA de-identification 	<ol style="list-style-type: none"> Management of consumer-identified locations for the storage of their personal health records Support of consumer information location requests and data routing to consumer-identified personal health records Management of consumer-controlled providers of care and access permissions information Management of consumer choices to not participate in network services Consumer access to audit logging and disclosure information for PHR and HIE data Routing of consumer requests for data corrections 	<ol style="list-style-type: none"> User identity proofing and/or attestation of third-party identity proofing for those connected through that HIE User authentication and/or attestation of third-party authentication for those connected through that HIE Subject and user identity arbitration with like identities from other HIEs Management of user credentialing information (including medical credentials as needed to inform network roles) Support of an HIE-level, non-redundant methodology for managed identities 	<ol style="list-style-type: none"> Management of available capabilities and services information for connected users and other HIEs HIE system security including perimeter protection, system management and timely cross-HIE issue resolution Temporary and permanent de-authorization of direct and third-party users when necessary Emergency access capabilities to support appropriate individual and population emergency access needs
based on Gartner classification in Summary of the NHIN Prototype Architecture Contracts, May 2007, see Technical Workgroup and/or Technical Design for final details.			

Knowledge Repository and Transaction Routing	Meaningful EHR Use Requirements Met
<p>Phase 1-n KC BHIE's goal is to reduce the impact on providers and patients as well others in KC BHIE's customer base. To realize that goal it is necessary for exchange to occur in a unique and progressive environment. To that end the following exchange services should be embedded into the overall service capability of KC BHIE.</p> <ol style="list-style-type: none"> Access services at state level HIE for identity management and required coordination. Reduce KC BHIE technical requirements and potential overhead by relying on any common services offered through a state level HIE, such as terminology translation. KC BHIE was initiated by existing local exchanges. These exchanges have different missions and consumers. KC BHIE must have the inherent flexibility to exchange with existing local/regional exchanges. KC BHIE will require NHIN services. NHIN services can be provided directly or through another HIE, such as a state HIE. <p>Phase 1: Unique Aspects</p> <ol style="list-style-type: none"> Baseline. Target data structure foundation Continuity of Care Document (CCD see description below and mapping to XDS-MS). Foundational services including a communized, normalized patient data, Record Locator Service, Master Patient Index, single provider portal, EHR-lite (e-prescribing) and system interfaces. Fundamental exchange of clinical summary (demographics, allergies, problem list, medications, diagnostic results, vital signs including height, weight, blood pressure and computed BMI, progress note, advanced directives, smoking status). Care coordination through provider list and identifying health (medical) home. NEW! Identify family membership. 	<ol style="list-style-type: none"> 1 - 11.1.02 Drug-drug, drug-allergy, drug-formulary checks [OP, IP] 1 - 11.1.03 Up-to-date problem list of current and active diagnoses based on ICD-9 or SNOMED [OP, IP] 1 - 11.1.04 Permissible prescriptions electronically (eRx) [OP] 1 - 11.1.05 Active medication list [OP, IP] 1 - 11.1.06 Active medication allergy list [OP, IP] 1 - 11.1.07 Record primary language, insurance type, gender, race, ethnicity [OP, IP] 1 - 11.1.07.5 Record advance directives 1 - 11.1.08 Record vital signs including height, weight, blood pressure, BMI [OP, IP] 1 - 11.1.08.25 Record smoking status [OP, IP] 1 - 11.1.12 Document a progress note for each encounter [OP] 1 - 11.1.12.2 Check insurance eligibility electronically from public and private payers, where possible [IP, OP] 1,* - 11.2.02 Provide access to patient specific educational resources [OP, IP] 1 - 11.2.03 Provide clinical summaries for patients for each encounter [OP, IP] 1 - 11.3.01 Capability to exchange key clinical information (e.g., problem list, medication list, allergies, test results) among providers of care and patient authorized entities electronically. Health information exchange capability and demonstrated exchange to be specified by Health Information Exchange Work Group of HIT Policy Committee. [OP, IP] 1 - 13.1.03 Generate and transmit permissible prescriptions electronically [IP] 1 - 13.1.04 Manage chronic conditions using patient lists 1,* - 13.2.02 Provide access to patient-specific educational resources in common primary languages [OP, IP] 1 - 13.2.04 Documentation of family medical history, in compliance with GINA [OP, IP]

Φ^N Significant Target of Service where N is the year when the service is initially available to the customer, if N is not included the service is anticipated but has not yet completed a detail market analysis and technical design;
 \$ (method) Financial considerations. A subscription would include a periodic payment that might be scaled based on volume. A transaction fee would be assigned to each occurrence of the service will scale oriented incremental fees. Fee for service is a negotiated, task oriented fee.
 Grant is fees derived from a foundation, state or federal agency.

KC-BHIE Work Group: Services and Finance Deliverables
PHASE 2: FUTURE STATE ELECTRONIC HEALTH INFORMATION EXCHANGE ECOSYSTEM

Service Consumer Base and Fee Structure							
	Patient/ Consumer/ Caregiver	Direct (including HITECH Eligible) Care Providers	Ancillary Service Providers	Business Intelligence Service Consumers	Contributing Stakeholders	Employers	Other
2a		Φ ² \$ (tiered level of subscription most likely based on factor of inpatient admissions or outpatient episodes)	Φ ² \$ (tiered level of subscription most likely based on volume, e.g., number of tests)				
2b, 2c		Φ ² \$ (tiered level of subscription most likely based on factor of inpatient admissions or outpatient episodes)					
1a, 1b	Φ ² \$ (subscription and/or employer tiered fee structure similar to CareEntrust)						
5b, 5c				Φ ² \$ (subscription)			

Example transaction fee – Utah Health Information Network – payers click charge ~\$0.012 per transaction; providers annual charge ~ \$0.004 per transaction based on 70% benefit to payer and 30% to provider



KANSAS CITY BI-STATE HEALTH INFORMATION EXCHANGE (KC BHIE)

Common Services					
1. Personal Health	2. Point of Care	3. Administrative	4. Quality	5. Public Health	6. Research
a. Push or pull reminders for preventative/follow up care. b. Allow patient access to health information including clinical summaries as appropriate, tests and results.	a. Clinical messaging of orders/results. b. Push data to support medication reconciliation as part of episode workflow. c. Provide data that supports unique decision rule adopted by provider.		a. Patient lists by problem or quality issue. b. Provide data or service to facilitate quality reporting to CMS.	b. Push or pull selected lab results from clinical messaging to appropriate public health agencies. c. Push or pull selected diagnostic and/or clinical incident data to support syndrome surveillance data to appropriate public health agencies.	

Core Services			
Data	Consumer	User and Subject Identity	Management
a. Update core services.	a. Update core services.	a. Update core services.	a. Update core services.

based on Gartner classification in Summary of the NHIN Prototype Architecture Contracts, May 2007, see Technical Workgroup and/or Technical Design for final details.

KC-BHIE Work Group: Services and Finance Deliverables

Knowledge Repository and Transaction Routing	Meaningful EHR Use Requirements Met
<p>Phase 1-n KC BHIE’s goal is to reduce the impact on providers and patients as well others in KC BHIE’s customer base. To realize that goal it is necessary for exchange to occur in a unique and progressive environment. To that end the following exchange services should be embedded into the overall service capability of KC BHIE.</p> <ul style="list-style-type: none"> a. Access services at state level HIE for identity management and required coordination. b. Reduce KC BHIE technical requirements and potential overhead by relying on any common services offered through a state level HIE, such as terminology translation. c. KC BHIE was initiated by existing local exchanges. These exchanges have different missions and consumers. KC BHIE must have the inherent flexibility to exchange with existing local/regional exchanges. d. KC BHIE will require NHIN services. NHIN services can be provided directly or through another HIE, such as a state HIE. 	<ul style="list-style-type: none"> 2 - 11.1.01 CPOE all order types [OP] or 10% of all orders (any type) directly entered by authorizing provider (e.g., MD, DO, RN, PA, NP) through CPOE [IP] (medication, laboratory, procedure, diagnostic imaging, immunization, referral) – data entry only 2 - 11.1.09 Lab-test results into EHR as structured data [OP, IP] 2 - 11.1.10 Generate lists of patients by specific conditions to use for quality improvement, reduction disparities, and outreach [OP] or Generate lists of patients by specific [IP] 2 - 11.1.10.5 Report quality measures to CMS [OP, IP] 2 - 11.1.11 Send reminders to patients per patient preference for preventive /follow up care [OP] 2 - 11.1.11.5 Implement one clinical decision rule relevant to specialty or high clinical priority [OP] or related to a high priority hospital condition [IP] 2 - 11.2.01 Provide patients with an electronic copy of their health information (including lab results, problem list, medication lists, allergies) [OP] or (including lab results, problem list, medication lists, allergies, discharge summary, procedures) [IP] upon request. Electronic access to and copies of may be provided by a number of secure electronic methods (e.g., PHR, patient portal, CD, USB drive) 2 - 11.2.01.5 Provide patients with electronic access to their health information (including lab results, problem list, medication lists, allergies) [OP] or (including discharge instructions and procedures at time of discharge) [IP] upon request. Electronic access to and copies of may be provided by a number of secure electronic methods (e.g., PHR, patient portal, CD, USB drive) 2 - 11.3.02 Perform medication reconciliation at relevant encounters and each transition of care [OP, IP] 2 - 11.4.01 Submit electronic data to immunization registries where required and accepted [OP, IP] 2 - 11.4.02 Provide electronic submissions of reportable lab results to public health agencies [IP] 2 - 11.4.03 Provide electronic syndrome surveillance data to public health agencies according to applicable law and practice [OP, IP]
<p>Phase 2: Unique Aspects</p> <ul style="list-style-type: none"> a. Clinical messaging (provider to provider: transition/coordination of care, order/results), disease registries, immunizations and consumer specific facilitation of quality data collection and reporting. b. Clinical messaging (provider to patient: reminders for preventative/follow up care). c. Medication reconciliation data comparison as pulled by provider for an encounter or transition. 	<ul style="list-style-type: none"> 2 - 13.1.00 CPOE all order types (medication, laboratory, procedure, diagnostic imaging, immunization, referral) including electronic interfaces to receiving entities [OP, IP]. 2 - 13.1.06 Report to external disease (e.g., cancer) or device registries [OP (esp. specialists) [IP] 2 - 13.3.01 Retrieve and act on electronic prescription fill data [OP, IP] 2 - 13.4.01 Receive immunization histories and recommendations from immunization registries [OP, IP] 2 - 15.1.04 Multimedia support (e.g. x-rays) [OP, IP]

Φ^N Significant Target of Service where N is the year when the service is initially available to the customer, if N is not included the service is anticipated but has not yet completed a detail market analysis and technical design;
 \$ (method) Financial considerations. A subscription would include a periodic payment that might be scaled based on volume. A transaction fee would be assigned to each occurrence of the service will scale oriented incremental fees. Fee for service is a negotiated, task oriented fee.
 Grant is fees derived from a foundation, state or federal agency.

KC-BHIE Work Group: Services and Finance Deliverables
PHASE 3: FUTURE STATE ELECTRONIC HEALTH INFORMATION EXCHANGE ECOSYSTEM

Service Consumer Base and Fee Structure							
	Patient/ Consumer/ Caregiver	Direct (including HITECH Eligible) Care Providers	Ancillary Service Providers	Business Intelligence Service Consumers	Contributing Stakeholders	Employers	Other
2a		Φ ²⁺ \$ (tiered level of subscription most likely based on factor of inpatient admissions or outpatient episodes)					
2c, 2d, 2e		Φ ²⁺ \$ (tiered level of subscription most likely based on factor of inpatient admissions or outpatient episodes)	Φ ²⁺ \$ (tiered level of subscription most likely based on volume, e.g., number of tests)				
1a, 1b, 1c, 2b	Φ ²⁺ \$ (subscription and/or employer tiered fee structure similar to CareEntrust)	Φ ²⁺ \$ (tiered level of subscription most likely based on factor of inpatient admissions or outpatient episodes)	Φ ²⁺ \$ (tiered level of subscription most likely based on factor of inpatient admissions or outpatient episodes)				
5a, 5b				Φ ²⁺ \$ (subscription)			

Example transaction fee – Utah Health Information Network – payers click charge ~\$0.012 per transaction; providers annual charge ~ \$0.004 per transaction based on 70% benefit to payer and 30% to provider



KANSAS CITY BI-STATE HEALTH INFORMATION EXCHANGE (KC BHIE)

Common Services					
1. Personal Health	2. Point of Care	3. Administrative	4. Quality	5. Public Health	6. Research
<ul style="list-style-type: none"> a. Push home device monitoring data. b. Push or pull reminders for preventative/follow up care. c. Allow patient access to health information. 	<ul style="list-style-type: none"> a. Support provider reminders and alerts. b. Facilitate transferring data from home devices. c. Push or pull clinical summary at each transition of care. d. Push data to support medication reconciliation at all transitions. e. Push or pull data associated with patient specific, chronic condition decision support. f. Pull or receive and use public health alerts. 		<ul style="list-style-type: none"> a. Support enhanced data analysis and reporting. 	<ul style="list-style-type: none"> a. Push or pull anonymized syndrome surveillance data. b. Push public health alerts. 	

Core Services			
Data	Consumer	User and Subject Identity	Management
a. Update core services.	a. Update core services.	a. Update core services.	a. Update core services.

based on Gartner classification in Summary of the NHIN Prototype Architecture Contracts, May 2007, see Technical Workgroup and/or Technical Design for final details.

KC-BHIE Work Group: Services and Finance Deliverables

Knowledge Repository and Transaction Routing	Meaningful EHR Use Requirements Met
<p>Phase 1-n KC BHIE's goal is to reduce the impact on providers and patients as well others in KC BHIE's customer base. To realize that goal it is necessary for exchange to occur in a unique and progressive environment. To that end the following exchange services should be embedded into the overall service capability of KC BHIE.</p> <ul style="list-style-type: none"> a. Access services at state level HIE for identity management and required coordination. b. Reduce KC BHIE technical requirements and potential overhead by relying on any common services offered through a state level HIE, such as terminology translation. c. KC BHIE was initiated by existing local exchanges. These exchanges have different missions and consumers. KC BHIE must have the inherent flexibility to exchange with existing local/regional exchanges. d. KC BHIE will require NHIN services. NHIN services can be provided directly or through another HIE, such as a state HIE. 	<ul style="list-style-type: none"> 3 - 13.1.01 Use evidence-based order sets [OP, IP] 3,* - 13.1.04 Manage chronic conditions using decision support [OP, IP] 3,* - 13.1.05 Provide clinical decision support at the point of care (e.g., reminders, alerts) [OP, IP] 3 - 13.2.00 Access for all patients to PHR populated in real time with health data [OP, IP] 3 - 13.2.01 Offer secure patient- provider messaging capability [OP] 3 - 13.2.03 Record patient preferences (e.g., preferred communication media, advance directive, health care proxies, treatment options) [OP, IP] 3 - 13.2.05 Upload data from home monitoring devices [OP] 3 - 13.3.02 Produce and share an electronic summary care record for every transition in care (place of service, consults, discharge) [OP, IP] 3 - 13.3.03 Perform medication reconciliation at each transition of care from one health care setting to another [OP, IP] 3 - 13.4.02 Receive health alerts from public health agencies [OP, IP] 3 - 13.4.03 Provide sufficiently anonymized electronic syndrome surveillance data to public health agencies with capacity to link to personal identifiers [OP, IP]
<p>Phase 3: Unique Aspects</p> <ul style="list-style-type: none"> a. Guideline driven reminders and alerts. 	<ul style="list-style-type: none"> 3 - 15.1.01 Achieve minimal levels of performance on quality, safety, and efficiency measures 3 - 15.2.02 Patients have access to self management tools [OP] 3 - 15.2.03 Electronic reporting on experience of care [OP, IP] 3 - 15.3.01 Access comprehensive patient data from all available sources 3 - 15.4.03 Clinical dashboards [IP, OP] 3 - 15.4.04 Dynamic and Ad hoc quality reports [OP, IP]

Φ^N Significant Target of Service where *N* is the year when the service is initially available to the customer, if *N* is not included the service is anticipated but has not yet completed a detail market analysis and technical design;
 \$ (method) Financial considerations. A subscription would include a periodic payment that might be scaled based on volume. A transaction fee would be assigned to each occurrence of the service will scale oriented incremental fees. Fee for service is a negotiated, task oriented fee.
 Grant is fees derived from a foundation, state or federal agency.

KC-BHIE Work Group: Services and Finance Deliverables

PHASE 4: FUTURE STATE ELECTRONIC HEALTH INFORMATION EXCHANGE ECOSYSTEM

Service Consumer Base and Fee Structure							
	Patient/ Consumer/ Caregiver	Direct (including HITECH Eligible) Care Providers	Ancillary Service Providers	Business Intelligence Service Consumers	Contributing Stakeholders	Employers	Other
5a				Φ ²⁺			
				\$ (subscription)			

Example transaction fee – Utah Health Information Network – payers click charge ~\$0.012 per transaction; providers annual charge ~ \$0.004 per transaction based on 70% benefit to payer and 30% to provider



KANSAS CITY BI-STATE HEALTH INFORMATION EXCHANGE (KC BHIE)

Common Services					
1. Personal Health	2. Point of Care	3. Administrative	4. Quality	5. Public Health	6. Research
				a. Push or pull selected anonymized diagnostic and/or clinical incident data to support syndrome surveillance data to appropriate public health agencies. As warranted link to back to personal identifiers.	

Core Services			
Data	Consumer	User and Subject Identity	Management
a. Update core services.	a. Update core services.	a. Update core services.	a. Update core services.
based on Gartner classification in Summary of the NHIN Prototype Architecture Contracts, May 2007, see Technical Workgroup and/or Technical Design for final details.			

Knowledge Repository and Transaction Routing	Meaningful EHR Use Requirements Met
<p>Phase 1-n KC BHIE's goal is to reduce the impact on providers and patients as well others in KC BHIE's customer base. To realize that goal it is necessary for exchange to occur in a unique and progressive environment. To that end the following exchange services should be embedded into the overall service capability of KC BHIE.</p> <ul style="list-style-type: none"> a. Access services at state level HIE for identity management and required coordination. b. Reduce KC BHIE technical requirements and potential overhead by relying on any common services offered through a state level HIE, such as terminology translation. c. KC BHIE was initiated by existing local exchanges. These exchanges have different missions and consumers. KC BHIE must have the inherent flexibility to exchange with existing local/regional exchanges. d. KC BHIE will require NHIN services. NHIN services can be provided directly or through another HIE, such as a state HIE. 	<ul style="list-style-type: none"> 3 - 15.1.01 Achieve minimal levels of performance on quality, safety, and efficiency measures N - 15.1.02 Implement clinical decision support for national high priority conditions [OP, IP] 3 - 15.3.01 Access comprehensive patient data from all available sources 3 - 15.4.03 Clinical dashboards [IP, OP] 3 - 15.4.04 Dynamic and Ad hoc quality reports [OP, IP]
<p>Phase 4: Unique Aspects</p> <ul style="list-style-type: none"> a. HIE 2.0 enabling proactive, preventative, pervasive care. b. Integrative implementation of health (medical) home. c. Anonymized diagnostic and/or clinical incident data to support syndrome surveillance data as warranted linked to back to personal identifiers. 	

Φ^N Significant Target of Service where N is the year when the service is initially available to the customer, if N is not included the service is anticipated but has not yet completed a detail market analysis and technical design;

\$ (method) Financial considerations. A subscription would include a periodic payment that might be scaled based on volume. A transaction fee would be assigned to each occurrence of the service will scale oriented incremental fees. Fee for service is a negotiated, task oriented fee. Grant is fees derived from a foundation, state or federal agency.

KC-BHIE Work Group: Services and Finance Deliverables

UNMET MEANINGFUL EHR USE: FUTURE STATE ELECTRONIC HEALTH INFORMATION EXCHANGE ECOSYSTEM

Service Consumer Base and Fee Structure						
Patient/ Consumer/ Caregiver	Direct (including HITECH Eligible) Care Providers	Ancillary Service Providers	Business Intelligence Service Consumers	Contributing Stakeholders	Employers	Other

Example transaction fee – Utah Health Information Network – payers click charge ~\$0.012 per transaction; providers annual charge ~ \$0.004 per transaction based on 70% benefit to payer and 30% to provider



KANSAS CITY BI-STATE HEALTH INFORMATION EXCHANGE (KC BHIE)

Common Services					
1. Personal Health	2. Point of Care	3. Administrative	4. Quality	5. Public Health	6. Research

Core Services			
Data	Consumer	User and Subject Identity	Management

based on Gartner classification in Summary of the NHIN Prototype Architecture Contracts, May 2007, see Technical Workgroup and/or Technical Design for final details.

Knowledge Repository and Transaction Routing	Meaningful EHR Use Requirements Met
<p>Phase 1-n KC BHIE's goal is to reduce the impact on providers and patients as well others in KC BHIE's customer base. To realize that goal it is necessary for exchange to occur in a unique and progressive environment. To that end the following exchange services should be embedded into the overall service capability of KC BHIE.</p> <ul style="list-style-type: none"> a. Access services at state level HIE for identity management and required coordination. b. Reduce KC BHIE technical requirements and potential overhead by relying on any common services offered through a state level HIE, such as terminology translation. c. KC BHIE was initiated by existing local exchanges. These exchanges have different missions and consumers. KC BHIE must have the inherent flexibility to exchange with existing local/regional exchanges. d. KC BHIE will require NHIN services. NHIN services can be provided directly or through another HIE, such as a state HIE. 	<p>Yet to be resolved or covered by a service not offered by KC BHIE * - 11.1.12.4 Submit claims electronically to public and private payers [IP, OP]</p> <p>13.1.02 Record clinical documentation in EHR [IP] 13.1.07 Conduct closed loop medication management, including eMAR and computer-assisted administration [IP]</p> <p>1,* - 15.1.03 Medical device interoperability [OP, IP] 1,* - 15.4.01 Use of epidemiologic data [OP, IP] 1,* - 15.4.02 Automated realtime surveillance (adverse events, near misses, disease outbreaks, bioterrorism) [OP, IP]</p>

Φ^N Significant Target of Service where N is the year when the service is initially available to the customer, if N is not included the service is anticipated but has not yet completed a detail market analysis and technical design;
 \$ (method) Financial considerations. A subscription would include a periodic payment that might be scaled based on volume. A transaction fee would be assigned to each occurrence of the service will scale oriented incremental fees. Fee for service is a negotiated, task oriented fee.
 Grant is fees derived from a foundation, state or federal agency.