

Attachment D

Vendor Responsibilities and Service Levels

Vendor will provide services to the Health Information Exchange and Health Information Exchange Direct (HIE Direct) for Subscribing Participant as indicated below:

- **Application/Database Service:** Vendor guarantees that the application and database services will have an up-time of 99.9% during the Subscribing Participants’ principal period of operations (PPO), and 97% total on a monthly basis. Scheduled System Maintenance Windows and scheduled product deployments, patches, and upgrades are not counted as “down-time”.
- **Scheduled System Maintenance:** Vendor shall avoid performing maintenance between 0600 to 2000 Eastern Standard Time, Monday through Friday, inclusively, that will have a disruptive impact on the continuity or performance level of the application and database/hosting services. Vendor will use commercially reasonable efforts to notify Subscribing Participants prior to emergency maintenance. Vendor shall provide Subscribing Participants with electronic mail, telephone, facsimile, or written notice of all non-emergency, planned network maintenance (i) not less than three (3) business days prior to performing maintenance that, in its reasonable opinion, has a substantial likelihood of affecting Subscribing Participants’ use of the service. If Vendor’s planned maintenance is canceled or delayed, Vendor shall promptly notify Subscribing Participants and shall comply with the provisions of this section to reschedule any delayed maintenance.
- **Service Level Warranty:** Vendor will use commercially reasonable efforts to determine the source of any Unscheduled Downtime (defined as any downtime with respect to the Hosting Service which is not Scheduled System Maintenance) and restore availability of the Hosting Service if the problem rests within Vendor’s, or its employees’, agents’ or contractors’ control. Notwithstanding anything to the contrary herein, Vendor shall not be liable to SHI or its Subscribing Participants with respect to Unscheduled Downtime of the Hosting Service (i) that resulted from any unauthorized action or inactions of SHI or its Subscribing Participants; or (ii) that resulted from SHI or its Subscribing Participants’ equipment and/or third party equipment (not within the control of Vendor).
- **Hosting Service:** Vendor will host the Health Information Exchange (HIE) and HIE Direct system and the data associated with it. Vendor provides the following hosting configuration.

Hosting Facility	Hardened, hurricane proof facility
Data Backup	Daily incremental backups and weekly full backups
Hardware Maintenance	Hard drive defragmenting, swappable hard drive refreshing for redundancy, hardware upgrades, and

	hardware driver updates
OS Maintenance	OS upgrades, updates, service packs, hot fixes, and security patches
Virus Protection	Virus protection for both application and data
Encrypted Data	All Medical data stored in Vendor's facility will be encrypted
Firewall Security	Secures network from unauthorized access
99.9% Up-time	Network is up 99.9% of the time
Software Maintenance	Application updates, upgrades, fixes
T1 Capacity	1.54 megabits of bandwidth capacity
Redundant uninterruptible power supplies	2 UPS devices with the capacity to run 7 days without any electrical power
Multiple redundant back-up generators	2 or more back-up generators with the capacity to run 20 days on fuel
HVAC	Room equipped with heating, ventilation, and air conditioning systems that provide appropriate and consistent airflow, temperature and humidity levels
Multiple levels of security	Physical security consists of unique PINs and biometric scans
Fire Suppression	Room equipped with fire and smoke detectors, alarms and extinguishing systems based on local building codes. This includes pipe sprinkler systems and under-floor leak detection systems

- **Principal Period of Operations (PPO):** The subscribing Participants' principal period of operations (PPO) is to be from 07:00 a.m. to 07:00 p.m., Central Standard Time, Monday through Friday, excluding holidays.
- **State of the Art Equipment:** Vendor will host the HIE within a secure Cloud environment. Within this environment, HIE will occupy the appropriate number of application, integration, and database servers to ensure the desired availability and performance characteristics. It is Vendor's policy to monitor the Cloud environment and performance, adding CPU's, RAM or virtual machines as appropriate.
- **Data Backups:** Vendor will back up the database files daily and keep the backups for 15 working days so in the event of a catastrophic data loss Vendor can quickly restore back to working order with minimal data loss. Vendor' servers are also equipped with state of the art disaster recovery of operating systems, configurations and data files for error-free data recovery.

Levels of Technical Support

Support for HIE is segregated into three levels.

Level One:

Level One is the first level of support and is provided internally by SHI and its Subscribing Participants. This is the first point of contact for all operational users and customers. This level can solve administrative issues and provide full status updates. Level One support should be staffed 24x7 so that issues can be escalated (to Level Two) and prioritized as required.

This level provides initial troubleshooting for any issues that will be escalated to the next level if they cannot be resolved at this level.

Main Responsibilities:

- 1) Receive and respond to telephone support requests from the users and troubleshoot local system problems
- 2) Ensure version control for all customer accepted deliverables
- 3) Backup maintenance of the local database (tape change, contents check)
- 4) Periodically check HIE for accuracy of data and support Users in their requests for tracking data inquiries
- 5) Maintain and distribute call logs for all Level 1 Support calls received
- 6) Support field hardware and supplies inventories
- 7) Train workers on operational procedures
- 8) Assist customer with existing file feeds
- 9) Maintain master tables
- 10) Report server availability and report to Level 2 Support as needed
- 11) Address issues with Level Two support contact as needed and provide all details pertaining to a system support issue including but not limited to:
 - a) Caller name
 - b) System name
 - c) Application name
 - d) Function name
 - e) Detail description of issue
 - f) Steps taken by user that leads to issue
 - g) Screen shots (if applicable)
 - h) Initial troubleshooting performed and results
 - i) Severity level of issue
 - j) Full name and phone number of user to be contacted about the issue

Level Two:

Level Two is the first level of support in which the Vendor is involved. The Project Manager (PM) has administrative rights to make configuration changes that would correct a known problem. The PM also provides advanced support for any issue tickets that will be escalated to the next level. The PM provides status to Level One support.

The PM records and manages requests to correct a system problem or outage only. Information (feature/functionality related) requests should be limited to Level One Support. However, if functionality question cannot be answer by a Level One support call to the PM can only be made within the PPO.

HIE training is not a Level Two support task and can be requested through Vendor's Account Manager.

Main Responsibilities:

- 1) Maintain call logs for all calls received
- 2) Provide a daily report of the current status of open and escalated issues, delivered via email, at Vendor's close of business, excluding statutory holiday
- 3) Hold a weekly conference call to discuss status of reported issues
- 4) Correction, at Subscribing Participant's request, of bad data entered into the system
- 5) Provide Resolution of Level One support issues escalated to Level One support issues escalated to Level Two
- 6) Escalate software defect issues to Level Three support
- 7) Ensure optimum server performance and availability

Severity Codes/ Response time/ Resolution Time:

The following characteristics are used to identify the severity of a problem report:

- Business and financial exposure
- Work outage
- Number of user affected
- Workaround
- Resolution time

It is not necessary (nor is it likely) to have perfect match of each characteristic to categorize a problem report at a particular severity level. A given problem must be judged against each of the characteristics to make an overall assessment of which severity level best describes the problem. Level One support and Vendor's helpdesk may jointly determine the initial severity level for the report. The severity level may be modified after the problem is better understood and/or a workaround is mad available by the vendor.

Severity 1 (Critical)	Severity 2 (High)	Severity 3 (Medium)	Severity 4 (Low)
Business and Financial Exposure:			
The application failure creates a very serious business and financial exposure	The application failure creates a serious business and financial exposure.	The application failure creates a medium business and financial exposure.	The application failure creates a minimal business and financial exposure
Work Outage:			
The application failure causes the Subscribing Participants to be unable to work or perform some very significant portion of their job,	The application failure causes the Subscribing Participants to be unable to work or perform some significant portion of their job.	The application failure causes the Subscribing Participants to be unable to perform some small portion of their job, but they are still able to complete most other tasks. May also include questions and requests for information.	The application failure causes Subscribing Participants to be unable to perform of their job, but they are still able to complete most other tasks.
Number of Users Affected:			
The application failure affects a very large number of users, or an entire facility regardless of the number of users at the facility.	The application failure affects a large number of users, or an entire facility regardless of the number of users at the facility.	The application failure affects a small number of users.	The application failure may only affect one or two users.
Workaround			
There is no acceptable workaround to the problem (i.e., the job cannot be performed in any other way)	There is an acceptable and implemented workaround to the problem (i.e., the job can be performed in some other way)	There may or may not be an acceptable workaround to the problem.	There is likely an acceptable workaround to the problem.
Response Time: Vendor will acknowledge incoming telephonic technical support requests from SHI and its Subscribing Participants made during the PPO within the resolution time below regardless of the severity. This call can be used to set the expectation of SHI and its Subscribing Participants toward a resolution. Acknowledgement will consist of a telephonic response to the actual caller, the Level One support operation or Subscribing Participants' Project Manager. A voice message satisfies the acknowledgement requirement.			
Within thirty (30) minutes.	Within thirty (30) minutes.	Within thirty (30) minutes.	Within thirty (30) minutes.
Resolution Time: Level One support must provide Level Two support with all the issue information as defined in Level One section; failure to perform the tasks outlined and to provide adequate detail of the issue may impact the resolution time. Resolution timelines still apply even if software defects are escalated from Level Two support to Level Three. However, SHI and its Subscribing Participants reserve the right to waive or extend the resolution timelines if an issue is escalated from Level Two support to Level Three.			
Twelve (12) continuous (clock) hours, with a call for status update every two hours until resolved.	Two (2) business days, with a call for status update every four hours within PPO until resolved.	Four (4) business days.	Fifteen (15) business days.

Level Three:

Level Three is the second level of support in which the Vendor is involved. The Vendor's PM engages Level Three if the application is not performing as designed or required. Level Three typically includes a developer with intricate knowledge of the application logic and system architecture that are necessary to resolve system, application, and database problems referred by the Vendor's PM. Level Three provides status to Level Two support.

Main Responsibilities:

- 1) Provide access to the technical expertise necessary to resolve system, application, and database issues referred by Level Two support.

OTHER SYSTEM MAINTAINANCE PROVIDED:

Vendor will also perform the following system maintenance tasks as needed.

- 1) Backup maintenance of the database (tape change, contents check, data bank communication)
- 2) Database physical maintenance (table spaces care, indexes refreshing, data load balancing)
- 3) Database structures maintenance (contents check, log files check)
- 4) Portal maintenance (servlet engine care, http service load balancing)
- 5) Script scheduling optimization (towards higher throughput of HL7 data)
- 6) Audit and analysis of logs on a regular basis and ensure the correct workflow
- 7) Perform disaster recovery procedures on the system
- 8) Perform security management procedures on the system

Vendor will retain audit trail data for a terminated Subscribing Participant for seven (7) years. In the event of termination of SHI's contract with a Vendor, then the Vendor (including any of its subcontractors or agents) shall no longer access or transmit any data to or receive data from Subscribing Participants' respective systems, and further Vendor will no longer access, use or store any Health Data through the HIE. Vendor shall comply with a transition plan approved by SHI or if none is agreed upon, Vendor will delete or destroy (and certify such destruction to SHI and Subscribing Participants) of any data, including but not limited to any Health Data.