

## **Contract Name: Install Message Transport/Encryption/Data integrity Layer**

### **Summary:**

Install the PHIN-MS version 3 Beta release client and server on twin websites.

The initial stage of the Electronic Health Record Pilot project involves putting together a working prototype which will send and receive messages containing information on an individual patient without pre-negotiation on the part of participant systems. Subsequent stages will expand the working prototype both in depth and in scope.

The system components will be assembled from existing open source implementations, the initial components of which are:

- **Transport/encryption/data integrity - candidate CDC PHIN-MS <<task for this contract**
- Message schema generator - possibly HL7-Java SIG alpha release
- Initial Message definitions - developed within NLM project by modifying existing messages
- Data Persistence Model Database - (for storing the clinical data)

This contract covers only the installation of the transport layer.

### **Task Deliverables:**

1. Install the PHIN-MS version 3 Beta release client and server on twin websites.
2. Set up the sender and receiver modules on two public websites.
3. Test that simple text messages can be sent and received.
4. Configure for test with systems that have firewall, public/private keys, password authentication.
5. Document the implementation steps in an implementation guide.
6. Verify that system can be rebuilt from scratch using implementation guide.
7. Participate in weekly HL7-NLM EHR Steering Committee Conference calls.
8. Advise the HL7-NLM EHR Steering Committee on interactions with other modules.

### **Task Description**

We envision the following web pages on our test site:

[www.hl7.org/NLM/EHR/TEST/SystemA/sender/sendprog.htm](http://www.hl7.org/NLM/EHR/TEST/SystemA/sender/sendprog.htm);  
... \SystemA\receiver\recieveprog.htm; ... \SystemB\sender\sendprog.htm;  
... \SystemB\receiver\recieveprog.htm. Each page will need a database source to store sent and received messages as well as routing and information.

Contractor will work from existing CDC documentation to install the newest beta version <http://www.cdc.gov/phn/messaging/index.htm>. Contractor can expect to receive some support for CDC development staff but will be responsible for making the system work as described.

**Required Skills:** Web Server Administration with J2EE compliant application server such as Tomcat or Silver Stream, Knowledge of XML, Java programming, database programming.

**Desired Skills:** Familiarity with HL7 v2 & v3 messaging, design experience with V3 messages and the HDF process.

**Expected start:** End of November 2004

**Estimated Hours:** 40

**Expected Duration:** 1 month

Tools, queries, programs, and methods used will be explicitly documented. Intellectual property will enter the public domain under the ownership of HL7.

Payment will be dependent on approval of the deliverable and payment by NLM to HL7.