eHealth Exchange Hub Initiator Testing – Self-Service

Objective
Hub initiator testing measures your organization’s ability to send requests over the Hub. Once you have validated the initiator capability in production using test patients and a test harness, your organization may proceed to convert existing production partner connections to send requests using the Hub.

We request that you please plan on successfully completing this testing no later than April 30, 2020.

Summary
Initiator testing is designed to expose the most common issues when sending requests over the Hub. The testing is minimized to expose such issues as Hub connectivity, initiator misconfiguration and Hub misconfiguration. Once initiator testing is successfully completed, your organization will obtain “Hub Two-Way” status which indicates that your gateway can respond to requests over the Hub and send requests over the Hub.

Success Criteria
Your organization will have successfully completed initiator testing once you have performed the following:

1. Send a patient discovery request to the Interoperability Testing Platform (ITP) which is connected to the Hub.
2. Receive a patient “NF” (not found) response from the ITP. The “not found” response should be free of any errors.

Self-Service Testing Requirements
1) You have already been promoted as a Hub responder.
2) You can use test patients for production testing.
3) You can configure your system to connect to the ITP via the Hub.
4) You have a Hub Dashboard account to confirm your test results.

Perform the Initiator Tests
1) Complete the testing prerequisites in Appendix A – Testing Prerequisites.
2) Using a synthetic test patient, send a patient discovery request to the ITP test platform via the Hub. (For Epic clients, use the “eHealth Exchange Hub Initiator Testing” record).
3) Using your HIE platform, verify that you have received at least one “not found” response from the ITP test platform. The response should not contain error messages that indicate anything other than a lack of patient matching. If you do not receive a “not found” response from the Hub, see Appendix B - Common Testing Issues.

Initiator Validation Options

Option 1 – Self Validation (Preferred)
1) Login to the production Hub Dashboard and take a snapshot of your organization as an initiator.

<table>
<thead>
<tr>
<th>As Rep</th>
<th>As Initiator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Discovery</td>
<td></td>
</tr>
<tr>
<td>Documents</td>
<td></td>
</tr>
<tr>
<td>Query for Documents</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Select the “As Initiator” tab, and under Patient Discovery the counts to the right should show at least one “Not Found”.

2) Send the Dashboard snapshot to administrator@ehealthexchange.com, with the following subject: “<Your organization name> - Requesting validation of Hub initiator testing”.
3) Upon completion of the steps above, eHealth Exchange staff will reply to your email (typically within 1 to 2 working days) to confirm successful initiator testing.

Option 2 – Request Validation Confirmation
1) If the Dashboard is experiencing latency issues and is not currently displaying your initiator test, please send a request to administrator@ehealthexchange.com, with the following subject: “<Your organization name> - Requesting validation of Hub initiator testing”.
2) Once received, eHealth Exchange staff will reply to your email (typically within 1 to 2 working days) to confirm successful initiator testing.
Appendix A - Testing Prerequisites

1. Test Patient Usage
   - Populate your production system with at least one test patient. The test patient will be used to query the ITP via the Hub. Use the test patient suggested below if you want the ITP to return a matching “patient found” response for patient discovery messages.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Middle Initial</th>
<th>Last Name</th>
<th>DOB</th>
<th>Gender</th>
<th>SSN</th>
<th>Patient Identifier</th>
<th>Assigning Authority</th>
<th>Marital Status</th>
<th>Street Address</th>
<th>City</th>
<th>State</th>
<th>Zip</th>
<th>Country</th>
<th>Home Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHXTEST</td>
<td></td>
<td>ZZTESTHUB</td>
<td>1963/11/20</td>
<td>M</td>
<td>666000006</td>
<td>HUB1357</td>
<td>2.16.840.1.113883.3.7204.1.3.2.1</td>
<td>MARRIED</td>
<td>660 5th St</td>
<td>LA JOLLA</td>
<td>CA</td>
<td>92038</td>
<td>USA</td>
<td>666-000-0005</td>
</tr>
</tbody>
</table>

   - The test patient should be setup to permit a query to an external system. In some systems (such as Epic CareEverywhere), this may mean that the test patient will be required to have an active encounter and have minimal synthetic medical data associated to the test patient.

2. ITP Connectivity
   - Configure your production system to send test messages to the Hub ITP testing platform. The Hub ITP XCPD endpoint and HCID is below.
   - Participants using Epic may reach out to their Epic TS for an organization record (“DXO” record) for eHealth Exchange Hub initiator testing.

<table>
<thead>
<tr>
<th>Test Responder</th>
<th>Environment</th>
<th>HCID</th>
<th>Type</th>
<th>Endpoint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hub ITP</td>
<td>Production</td>
<td>2.16.840.1.113883.3.7204.1.3.2.1</td>
<td>PD</td>
<td><a href="https://hub001prod.ehealthexchange.org/ehx/1.0.0/iti55/2.0?_eHxHubRouteTo=2.16.840.1.113883.3.7204.1.3.2.1">https://hub001prod.ehealthexchange.org/ehx/1.0.0/iti55/2.0?_eHxHubRouteTo=2.16.840.1.113883.3.7204.1.3.2.1</a></td>
</tr>
</tbody>
</table>

3. Hub Dashboard Access
   - Please confirm you have a Hub Dashboard login. Each Participant has an “authorized-user” at their organization who can create additional Hub Dashboard accounts for their organization. If you have not been provisioned with a Dashboard account, please email administrator@ehealthexchange.org to request an account. Provide the following:
     - An email address which will be used as your login ID
     - A mobile phone number which will be used for two-factor authentication.
# Appendix B - Common Testing Issues

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Issue</th>
<th>Remediation</th>
</tr>
</thead>
</table>
| **Timeout**                      | There is no response from the Hub after sending a patient discovery message.  | The Hub’s firewall may be blocking your requests.  
Typically, your system will indicate a timeout exception or a “no response” message when the Hub’s firewall blocks requests.  
If you suspect a firewall issue, please send an email to hubservicedesk@ehealthexchange.org and copy administrator@ehealthexchange.org.  
Specify your organization’s name, and if known, your organizations public IP addresses from which your requests originate from.  
Ask the service desk to confirm that you have been whitelisted on the Hub Inbound Whitelist (that is, traffic from your initiating gateway to the Hub), and if so, ask for the IP address(es) that are in the whitelist for your organization.  
Work with your network team to confirm the correct public IP address values and provide these values back to the service desk.  
Note that whitelist updates typically take 2 to 3 days to complete. |
| **Communication error**          | An error response is received noting a communication error had occurred.        | The Hub’s firewall may be blocking your requests.  
If you suspect a firewall issue, please send an email to hubservicedesk@ehealthexchange.org and copy administrator@ehealthexchange.org.  
Specify your organization’s name, and if known, your organizations public IP addresses from which your requests originate from.  
Ask the service desk to confirm that you have been whitelisted on the Hub Inbound Whitelist (that is, traffic from your initiating gateway to the Hub), and if so, ask for the IP address(es) that are in the whitelist for your organization.  
Work with your network team to confirm the correct public IP address values and provide these values back to the service desk.  
Note that whitelist updates typically take 2 to 3 days to complete. |
| **Hub-specific error response**  | You may not receive a response from the Hub or the Hub may indicate that it does not know how to route your organization’s request. | Please send an email to hubservicedesk@ehealthexchange.org and copy administrator@ehealthexchange.org. Specify your organization’s name and home community ID (HCID) in the email and ask to confirm that the Hub’s registry is configured to accept requests from your organization. |
| **Other**                        |                                                                                | Please send an email to hubservicedesk@ehealthexchange.org and copy administrator@ehealthexchange.org. Specify your organization’s name and home community ID (HCID) in the email and include as much detail as possible regarding the issue.  
**You can also join one of our semi-weekly testing sessions:**  
- Tuesdays, 1:30 – 3:30 PM ET  
- Thursdays, 3:00 – 4:00 PM ET  
https://global.gotomeeting.com/join/617130221  
**You can also dial in using your phone.**  
United States (Toll Free): 1 866 899 4679  
United States: +1 (571) 317-3116  
Access Code: 617-130-221 |