VENDOR CERTIFICATION PROCESS INFORMATION

This document outlines the process whereby a PACS/CVIS/other software system can become an ImageGuideEcho Certified Software Reporting Vendor.

Non-Disclosure Agreement & ImageGuideEcho Specifications:

The vendor will be required to execute a Non-Disclosure Agreement (NDA) prior to receiving the ImageGuideEcho specifications. Once the fully executed NDA is received, the registry specifications will be sent to the vendor.

The specifications consist of the following:

> **Software Vendor Certification Process Outline**
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> 1. Non-Disclosure Agreement Executed
> 2. Data Specifications Received
> 3. Letter of Intent Signed
> 4. Certification Readiness Questionnaire
> 5. Certification Process Initiated
>   a. Vendor Authorization Agreement
>   b. Data Validation
> 6. Certification Process Completed
>   a. Designation Provided

1. *Data Collection Form* – Depicts the data elements included in the registry.
2. *Data Dictionary* – Available in multiple formats, including PDF and MS-Excel.
3. *XML Schema Definition (XSD)* – Describes how XML documents are to be formatted for submission to the registry.
4. *Clinical Scenarios* – Demonstrates how the data submission XML data files are to be formatted for a number of completed sample data collection forms.
5. *Functional Requirements* – Defines data transmission, file transmission protocols, file naming conventions, XSD requirements, etc. Also includes information regarding how the registry vendor will validate each XML document submitted to the registry as well as how file errors are reported to the end-user.
6. *Change Log (if applicable)* – Describes the modifications made to the specifications since last distributed.

Certification Readiness Questionnaire:

Once the vendor indicates a readiness to undergo certification, the vendor will complete a **Certification Readiness Questionnaire**. The intent of the questionnaire is to assess if the vendor has completed development of the application and is ready to be certified. The questionnaire addresses the following areas:

1. 100% of the data elements are included in the application
2. 100% of the selections have been included in the application
3. Repeating data elements (i.e., can multiple occurrences of elements x, y and z be exported)
4. Resubmission of studies that were previously submitted
5. Missing functional requirements

In the event the vendor has not completed 100% of the requirements as defined in the specifications, a determination will be made as to if the certification process can go forward.

Software Vendor Certification Process:

To initiate the Certification Process, the vendor will receive the **Vendor Authorization Agreement**, which formalizes the relationship between ASE and the vendor and outlines ASE and vendor responsibilities while the vendor is an ImageGuideEcho Certified Reporting Vendor. This document should be complete before official designation as a Certified Reporting Vendor is given, though the Certification Process may commence as the contract is reviewed.

The vendors will then undergo a **Software Certification Process** to verify the following:

1. 100% of the data elements exist in the application.
2. 100% of the data element selections exist in the application.
3. XML export file is formatted correctly and can be consumed by the registry.
4. Codes exported for each selection to the XML export file match the selection descriptions as defined in the Data Dictionary.
5. Application supports multi-select fields as defined by the Data Dictionary and XSD.
6. Application supports multiple studies exported into a single XML export file.
7. Application allows for studies to be resubmitted in the event required data elements are missing or a data edit has failed.
8. Application includes the appropriate identifiers so resubmitted studies are replaced and not inserted as new.
9. Application correctly accommodates parent-child fields and does not export child fields unless required by the parent.
10. Appropriate whole number and decimal places are being exported.
11. Application can successfully transmit the data to the registry.

Data Validations:

To assure the vendor is exporting the appropriate codes for each element selection, the vendor will enter a number of test cases into their application. The number of test cases that must be entered will depend on the number of selections available for the data elements. In the event the number of selections is excessive (i.e. exceeds 8), the vendor will not be required to enter a test case to verify each selection. They will be requested to provide a screen shot of the selections and the source code that describes the corresponding export codes for each of the selections.

When the test cases have been entered, the vendor will be requested to transmit the test cases to the registry. Prior to starting the certification process, the vendor will be assigned FTP credentials to allow them to send data to the registry where it can be viewed by registry staff.

Once a test case has been received, the XML will first undergo an XSD conforming XML schema test. In the event the XSD schema test fails, the certification process will be halted until this problem has been remedied. If the XML file passes the XSD schema text, the XML file will be compared against the XML that is expected for the test case. Discrepancies in the field names, free-form text and selection codes will be documented in a "Bug List." This process will be repeated for each test case. The Bug List will be returned to the vendor so the appropriate coding changes can be made.

The certification process takes about 20-40 hours depending on the number of test cases that are required to be entered. The certification may take longer depending on the number of defects found and the amount of time it takes to have the defects resolved. It should also be noted that there may be situations where the Registry Committee Chair or other designated committee member(s) may need to make decisions regarding issue resolution, relaxing requirements, etc. This too can affect how quickly a vendor can be certified.

Completed Certification:

Once the certification process is complete and the Vendor Authorization Agreement is signed, the vendor will receive a seal with designation as an "ImageGuideEcho Certified Reporting Vendor." This seal may be used on marketing materials, including ads and signage. ASE may also elect to publicize the vendor through recognition as a certified software vendor, providing increased visibility to ASE's over 17,000 members.

We look forward to working with you during this process!

Please contact info@imageguideecho.org with questions.