ONC Health IT Certification Program

- ONC’s Health IT Certification Program launched in 2010.
- Voluntary certification program established to provide for the certification of health IT standards, implementation specifications, and certification criteria adopted by HHS.
- Provides assurance to purchasers and other users that a system meets the technological capability, functionality, and security requirements adopted by HHS.
- Program supports the availability of certified health IT for its encouraged and required use under other federal, state, and private programs.
ONC’s Certified Health IT Product List (CHPL)

• The ONC CHPL is the authoritative, comprehensive listing of all health IT products that have been tested and certified under the ONC Health IT Certification Program.

  https://chpl.healthit.gov

• Health IT products are listed on the CHPL after eligible components have been successfully tested by an ONC Authorized Testing Laboratory (ONC-ATL) and certified by an ONC Authorized Certification Body (ONC-ACB).

• The CHPL contains data on certified health IT that includes information on:
  » Certification criteria to which the health IT has been certified
  » Usability testing results
  » Non-conformities, including any surveillance activities and their corrective action plans/resolution
Open CHPL

- ONC compiles information submitted from ONC-Authorized Certification Bodies (ONC-ACBs) to generate the data on the CHPL.
  - In the past, much of the data on testing and certification was provided in unstructured documents.
- In 2016, CHPL’s design updated in order to allow users to have better access to the data in structured, discrete formats.
  - Note, only the 2015 Edition certified health IT products would have complete data available in these structured formats.
- All the data is viewable directly on the CHPL website.
  - For users who want greater access to the data, the CHPL has APIs and downloadable XML files containing the complete data available.
Accessing the CHPL Data

• **Downloadable Data** [https://chpl.healthit.gov/#/resources/download]
  
  » The full data for each edition (2011, 2014 and 2015) are available as XML.
  
  » Select data fields are available for 2014 and 2015 Editions in CSV.
  
  » Surveillance data are available in CSV.
  
  » Documentation or definition files are available for each downloadable dataset.

• **APIs** [https://chpl.healthit.gov/#/resources/chpl_api]
  
  » APIs are available to directly connect your application or software to the CHPL data.
  
  » Registration is required to use the APIs.
  
  » Registration provides you a unique API Key, which is required to query the APIs.
CHPL Downloadable Data

• **XML**
  
  » Each unique node in the XML is called `<listing>`. A listing is each unique certified product version. A unique product may have more than one listing (or version), and a unique developer may have more than one product (and, therefore, more than one listing).

  » Each `<listing>` contains all data related to the certificate.

    – Aside from the basic metadata, each listing includes certification results, testing results, relied upon software, clinical quality measures and standards used for each health IT module.

• **CSV**

  » Each row of the CSV represents a unique listing (as defined above). The CSV provides the high level details of each listing, but does not include more granular information like testing results, relied upon software and standards.

  » The downloadable surveillance data includes all information on surveillance results, including surveillance results, corrective actions plans (CAP) and CAP status.
CHPL APIs

- The CHPL APIs are web-based and return data in a JSON structured format.
  - All public users can perform GET requests for each publicly available API, meaning you can perform a query of the CHPL database and return a set of data in JSON based upon that query.
  - The CHPL API webpage [https://chpl.healthit.gov/#/resources/chpl_api](https://chpl.healthit.gov/#/resources/chpl_api) includes documentation for each API, release notes shared on GitHub and a sample Java application that uses the CHPL API.
  - Some APIs don’t return a JSON structured dataset. For example, the /download API can be used to programmatically download the downloadable XML datasets.
Develop a software application that makes use of the data in the CHPL application programming interfaces (APIs) or XML files in novel ways.
Challenge Requirements


• **Winners will be selected based on the following criteria:**
  
  » Software application’s adherence to the requirements
  
  » Software application’s use of data from the CHPL
  
  » Software application’s value in identifying and solving a problem in health care or health IT
  
  » Creativity in problem solving of key health care or health IT issues
  
  » Ease of use, user-friendliness, best practices

• **Winners will be announced soon!**
  
  » $40,000 in prizes
Putting the CHPL Data in Context

- There are thousands of listings of certified health IT products in the CHPL. However, those listings represent many different versions of products from many different developers.

- These products are used by a wide range of health care providers with large variation in the number of providers who use each product.
Market Data Meets CHPL Data

• 2015 Edition Market Readiness for Hospitals and Clinicians

• It’s important to use market data to contextualize CHPL data.
  » Understand impact of rulemaking
  » Model impact on market of individual certifications
  » Provide insights on market changes

• Market data allows us to quantify and visualize the adoption of FHIR in 2015 Edition certified health IT.
Objective: Estimate the availability of FHIR across EHRs currently used by hospitals and office-based practices nationwide.


- ONC reviewed the API documentation for all 2015 Edition products certified to 170.315(g)(8) (“Application access-data category request”) to determine the syntax of the certified API.
  - Documentation is available on developers’ public websites.
  - Links to documentation (webpages and PDFs) are available on the CHPL: [https://chpl.healthit.gov/#/collections/apiDocumentation](https://chpl.healthit.gov/#/collections/apiDocumentation).
  - Documentation was reviewed by ONC staff to determine the syntax of the certified API. It was determined whether the API used FHIR (release 2 or 3), a non-FHIR RESTful API, or Other API.
Public API Documentation Data

• API Information for 2015 Edition Products
  » https://chpl.healthit.gov/#/collections/apiDocumentation

• This list includes all health IT products that have been certified to at least one of the following API Criteria:
  » §170.315 (g)(7): Application Access - Patient Selection
  » §170.315 (g)(8): Application Access - Data Category
  » §170.315 (g)(9): Application Access - All Data Request

• The API Documentation Data documents the API syntax and authorization standard used for all 2015 Edition certified APIs.
  » The data will capture, over time, changes in API documentation and provide a transparent method to share ONC’s work to document 2015 Edition certified APIs.
Surveillance Data

- ONC-ACBs must report, at a minimum, the results of their surveillance on a quarterly basis, and these results are reported to the CHPL.

- A certified product is non-conforming if, at any time, an ONC-ACB or ONC determines that the product does not comply with a requirement of certification.
  
  » Note: Not all non-conformities affect a product's functionality, and the existence of a non-conformity does not by itself mean that a product is "defective."

- **Surveillance Activity**: Entire collection of surveillance activity reported to the CHPL. Available as a CSV file.

- **Non-Conformities**: Collection of surveillance activities that resulted in a non-conformity. This is a subset of the data available in the above "Surveillance Activity" file. Available as a CSV file.
Resources

- CHPL: [https://chpl.healthit.gov](https://chpl.healthit.gov)
- CHPL Overview: [https://chpl.healthit.gov/#/resources/overview](https://chpl.healthit.gov/#/resources/overview)
- CHPL Downloadable Data: [https://chpl.healthit.gov/#/resources/download](https://chpl.healthit.gov/#/resources/download)
- CHPL APIs: [https://chpl.healthit.gov/#/resources/chpl_api](https://chpl.healthit.gov/#/resources/chpl_api)
- API Information for 2015 Edition Products: [https://chpl.healthit.gov/#/collections/apiDocumentation](https://chpl.healthit.gov/#/collections/apiDocumentation)
- ONC Health IT Certification Program FAQs: [https://www.healthit.gov/topic/certification-ehrs/frequently-asked-questions](https://www.healthit.gov/topic/certification-ehrs/frequently-asked-questions)
Questions?
THANK YOU!

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Health IT Feedback Form:  
http://healthit.gov/healthit-feedback