Heat Wave: The U.S. is Poised to Catch FHIR in 2019

2015 Edition certified-APIs enabled with FHIR

Wesley Barker, ONC/OTECH
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”).
  - Documentation is available on developers’ public websites.
  - Links to documentation (webpages and PDFs) are available on the CHPL: 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.

- Medicare EHR Incentive Program attestation data were used to approximate developer market share.

- The two data were merged to approximate availability of FHIR among hospital and office-based practices, given most recently reported certified technology.

- These measurements approximate FHIR availability if health care providers upgraded their certified technology to 2015 Edition.
Results

• 32% of the health IT developers certified to 170.315(g)(8) published that they are using FHIR Release 2.

• Nearly 51% of health IT developers are using a version FHIR combined with OAuth 2.0.
  » The specific version of FHIR could not be determined all cases. Unless the version was explicitly stated in the documentation, it was documented as “some version of FHIR”.

• Although approximately 1 in 3 developers use FHIR Release 2 and half use any version of FHIR, the market impact is much greater.

• 87% of hospitals and 69% of clinicians are served by health IT developers with product(s) certified to any FHIR version.

• 82% of hospitals and 64% of clinicians use certified technology from the ten developers with the largest market share.
  » All ten of these developers certified APIs that use FHIR.
## FHIR Use among Market Leaders

<table>
<thead>
<tr>
<th>Ten Developers with the Largest Market Share</th>
<th>API standard Referenced</th>
<th>% of Hospitals Report Using</th>
<th>% of Clinicians Report Using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allscripts</td>
<td>FHIR Release 2</td>
<td>5%</td>
<td>9%</td>
</tr>
<tr>
<td>athenahealth</td>
<td>FHIR Release 2</td>
<td>&lt;1%</td>
<td>5%</td>
</tr>
<tr>
<td>Cerner</td>
<td>FHIR Release 2</td>
<td>21%</td>
<td>5%</td>
</tr>
<tr>
<td>CPSI</td>
<td>FHIR Release 2</td>
<td>10%</td>
<td>—</td>
</tr>
<tr>
<td>eClinicalWorks</td>
<td>FHIR Release 3</td>
<td>—</td>
<td>7%</td>
</tr>
<tr>
<td>Epic</td>
<td>FHIR Release 2</td>
<td>21%</td>
<td>27%</td>
</tr>
<tr>
<td>GE</td>
<td>FHIR Release 2</td>
<td>&lt;1%</td>
<td>5%</td>
</tr>
<tr>
<td>MEDHOST</td>
<td>FHIR Release 2</td>
<td>5%</td>
<td>—</td>
</tr>
<tr>
<td>MEDITECH</td>
<td>FHIR Release 2</td>
<td>20%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>NextGen</td>
<td>FHIR Release 2</td>
<td>&lt;1%</td>
<td>6%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>82%</td>
<td>64%</td>
</tr>
</tbody>
</table>
Percent of hospitals with a 2015 Edition certified-API enabled with FHIR

By Hospital Referral Region

% w/ FHIR

<50%  51-75%  76-99%  100%

Source: CHPL; Medicare EHR Incentive Program
Notes: (1) gray areas = HRR with no hospital; (2) The most recent attestations to the Medicare EHR Incentive Program were used to determine EHR installations for all hospitals. These attestations may not reflect the most currently installed technology for all hospitals. In some cases, %’s may be underestimated for HRRs.
Percent of clinicians with a 2015 Edition certified-API enabled with FHIR

By Hospital Referral Region

% w/ FHIR □<50% □51-75% □76-99%

Source: CHPL; Medicare EHR Incentive Program
Notes: (1) gray areas = HRR with no clinicians; (2) The most recent attestations to the Medicare EHR Incentive Program were used to determine EHR installations for all clinicians. These attestations may not reflect the most currently installed technology for all clinicians. In some cases, %'s may be underestimated for HRRs.
Blog and Data

• Heat Wave: The U.S. is Poised to Catch FHIR in 2019:

• API Documentation:
  https://chpl.healthit.gov/#/collections/apiDocumentation

  » Also, available as machine-readable data here:
    https://chpl.healthit.gov/#/resources/download

• Medicare EHR Incentive Program Attestation Data: