



DSS Juno ConnectEHR 22 Test Plan

CHPL # 15.04.04.2925.CONN.04.04.0.230427

<https://junohealth.com/certifications>

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Plan Report IT: JCONv22-2024-01



Care Coordination

Passed

- §170.315(b)(1) Transition of care
- §170.315(b)(7) Security tags – summary of care – send
- §170.315(b)(8) Security tags – summary of care – receive
- §170.315(b)(10) Electronic Health Information Export

Application Programming Interfaces

Passed

- §170.315(g)(10) Standardized API for patient and population services

Public Health

Passed

- §170.315(f)(1) Transmission to immunization registries
- §170.315(f)(2) Transmission to public health agencies – syndromic surveillance



| Criteria: | Care Setting: | Measurement Period: | Date: | Key Milestones: |
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| Care Coordination | | | | |
| § 170.315(b)(1) Transitions of care § 170.315(b)(7) Security tags – summary of care – send § 170.315(b)(8) Security tags – summary of care – receive | Ambulatory & Inpatient | 7/1/2024 – 9/30/2024 | May, 2024 | <input type="checkbox"/> Confirm Trading Partner Confirm ability to send and receive clinical documents Confirm with TP that production data will be used, whether in an actual live environment or a copy of a live environment |
| | | | Jun, 2024 | <input type="checkbox"/> Care provider selects recipient from directory of Direct addressed and initiates sending of Clinical Documents. The user is able to create a C-CDA Release 2.1 that also includes the reason for referral, and the referring or transitioning provider's name and office contact information. C-CDA Care Referral or Referral Note is triggered to send via Direct Protocol Care Provider reviews the Direct Status screen (under Direct Outgoing menu choice) to ensure Clinical Document was successfully transmitted. |
| | | | June, 2024 | <input type="checkbox"/> Care provider selects recipient from directory of Direct addresses and initiates sending of Clinical Document. Care provider creates a C-CDA Release 2.1 Discharge Summary Document that also includes the discharge instructions. Care provider reviews the Direct Status screen (under Direct Outgoing menu choice) to ensure Clinical Document was successfully transmitted via Direct protocol. |
| | | | June, 2024 | <input type="checkbox"/> Recipient uses scorecard to grade C-CDA |
| | | | July, 2024 | <input type="checkbox"/> Tester uses Document Center to locate Clinical Document Care Provider reviews the Direct Status screen (under Direct Outgoing menu choice). |
| | | | August, 2024 | <input type="checkbox"/> |
| § 170.315(b)(10) Electronic Health Information export | Ambulatory & Inpatient | 7/1/2024 – 9/30/2024 | Start test plan execution: May, 2024 | <input type="checkbox"/> Date and time ranges can be configurable via the UI Targeted Practices can be configurable via the UI Patients exported can be configurable via the UI |
| | | | June, 2024 | <input type="checkbox"/> Check validity of output file |
| | | | July, 2024 | <input type="checkbox"/> Export summary was created and completed successfully |
| | | | Complete test execution: August, 2024 | <input type="checkbox"/> |
| Public Health | | | | |
| § 170.315(f)(1) Transmission to | Ambulatory & Inpatient | 7/1/2024 – 9/30/2024 | May, 2024 | <input type="checkbox"/> Has a state immunization registry that is enabled for bi-directional send/receive of immunization data. |



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| immunization registries | | | | | Already has a functional bi-directional immunization interface or would like to implement one to their registry. If we are unable to find a Client that meets these criteria, we will use the Alternate Test Procedure (see below). |
| | | | June, 2024 | <input type="checkbox"/> | Validate that immunization interface is functioning as expected |
| | | | July, 2024 | <input type="checkbox"/> | Verify immunization data was received in registry for patient A |
| | | | July, 2024 | <input type="checkbox"/> | Verify immunization data was received in EHR for patient B |
| | | | August, 2024 | <input type="checkbox"/> | See above |
| | | | May, 2024 | <input type="checkbox"/> | Has state immunization registry that can receive immunization data Already has a functional immunization interface or would like to implement |
| | | | June, 2024 | <input type="checkbox"/> | Validate that immunization interface is functioning as expected |
| | | | July, 2024 | <input type="checkbox"/> | Verify that immunization data was received for patient A |
| | | | August, 2024 | <input type="checkbox"/> | |
| § 170.315(f)(2) Transmission to public health agencies – syndromic surveillance | Ambulatory & Inpatient | 7/1/2024 – 9/30/2024 | May 2024 | <input type="checkbox"/> | Syndromic surveillance messages are successfully received and processed by public health agency. |
| | | | June, 2024 | <input type="checkbox"/> | Functioning HL7 2.5.1 Interface to public health agency |
| | | | August, 2024 | <input type="checkbox"/> | |
| Application Programming Interfaces | | | | | |
| § 170.315(g)(10) Standardized API for patient and population services | Ambulatory & Inpatient | 7/1/2024 – 9/30/2024 | May, 2024 | <input type="checkbox"/> | Partner with PHR or identify existing PHR that can achieve patient clinical data as described in this RWT Plan. We recommend MyLinks (https://www.mylinks.com) Ensure that PHR has functionality to access the Dynamic FHIR API, as described here. Partner with EHR that is integrated with the Dynamic FHIR API and Patient Portal Modules of ConnectEHR. |
| | | | June, 2024 | <input type="checkbox"/> | Encounter is created and visually confirmed |
| | | | July, 2024 | <input type="checkbox"/> | Dynamic FHIR API has transformed C-CDA into FHIR resources PHR app consumes FHIR resources to populate EHR data |
| | | | May, 2024 | <input type="checkbox"/> | Partner with a provider-centric app for improved patient care (e.g. growth charts, clinical decision support, patient charting) Ensure that app has functionality to access the Dynamic FHIR API, as described here Partner with EHR that is integrated with the Dynamic FHIR API module of ConnectEHR. |



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| | June, 2024 | <input type="checkbox"/> | Data is rendered correctly: Provider compares patient data in app to patient data in EHR and notes any discrepancies. |
| | May, 2024 | <input type="checkbox"/> | Partner with a provider-centric app for improved patient care (e.g. growth charts, clinical decision support, patient charting) Ensure that app has functionality to access the Dynamic FHIR API, as described here Partner with EHR that is integrated with the Dynamic FHIR API module of ConnectEHR. |
| | June, 2024 | <input type="checkbox"/> | Data is rendered correctly: Provider compares patient data in app to patient data in EHR and notes any discrepancies. |
| | August, 2024 | <input type="checkbox"/> | |

| Table of Contents | Associated Certification Criteria: § 170.315(b)(1) Transition of Care (Cures Update) § 170.315(b)(7) Security tags – summary of care – send § 170.315(b)(8) Security tags – summary of care – receive | | |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| | Measure Description: Send and receive Transition of Care (TOC) messages with other providers to close the referral loop. The patient's PHI will be exchanged using the C-CDA 2.1 Care Referral or Referral Note and DIRECT secure messaging for data transport. | Justification: We chose to concentrate on the aspects of this criterion that would: 1) showcase ConnectEHR's streamlined approach to provider-to-provider patient referrals and transitions of care with the ultimate goal being higher quality patient care 2) eliminate as much risk of data entry errors as possible by transmitting patient data securely and electronically rather than relying on manual data entry for referrals 3) Reduce the overall time burden of manual data entry 4) ensure private and secure transmission of patients' PHI 5) result in increased interoperability between disparate HIT systems. | |
| | Metric Description: 1) 100 percent of outbound TOC's successfully received by HISP 2) Average C-CDA grade from scorecard for C-CDA's generated from ConnectEHR is a "C" or better 2) 75 percent of C-CDAs flagged as restricted were received in restricted status based on confirmed receipt from trading partner 3) 75 percent of trading partner's TOD C-CDAs successfully received by ConnectEHR. | Standards Implemented (SVAP): 1) USCDIv1 July 2020 Errata 2) Applicability Statement for Secure Health Transport, Version 1.2, August 2015 (Direct) 3) HL7 C-CDA R2.1 Implementation Guide, October 2019. CDAR2_IG_C-CDAA_CLINNOTES_R1_DSTU2.1_2015AUG_2019JUNwith_errata 4) HL7 Implementation Guide for CDA® Release 2: Consolidated CDA Templates for Clinical Notes (US Realm), Draft Standard for Trial Use, Volume 1 – Introductory Material, Release 2.1, August 2015 5) HL7 Implementation Guide for CDA® Release 2: Consolidated CDA Templates for Clinical Notes (US Realm), Draft Standard for Trial Use, Volume 2 – Templates and Supporting Material, Release 2.1, August 2015 6) HL7 Implementation Guide for CDA® Release 2: IHE Health Story Consolidation, DSTU Release 1.1 (US Realm) Draft Standard for Trial Use July 2012 7) ONC Implementation Guide for Direct Edge Protocols, Version 1.1, June 25, 2014 8) HL7® CDA R2 Implementation Guide: C-CDA Templates for Clinical Notes R2.1 Companion Guide, Release 2-US Realm, October 2019 | |
| | Developer Info: | Product Info: | Methods Use to Demonstrate Interoperability: |



| DYNAMIC HEALTH IT, INC. 320 Monticello Ave. New Orleans, LA 70121 504.309.9103 Ambulatory Care Setting: The ambulatory care setting is the most common one for ConnectEHR users. Many belong to specialties such as eye care, chiropractic and behavioral health. We don't specifically market to particular specialty areas, so this test plan generically applies to ambulatory care settings Inpatient Care Settings: Some ConnectEHR users are in a hospital setting, so we've included test steps for generation of discharge summaries. | | Product Name: Juno ConnectEHR Product Version: 22 CHPL ID: 15.04.04.2925.CONN.04.04.0.230427 | 1) HISP via Direct Protocol (SMTP) 2) HIE Exchange 3) HTTPS via secure provider portal | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------|-----------|----------|
| Test Step: | Testing Procedure: | Expected Outcomes: | Key Milestone Date: | Key Milestone: | Outcomes: | Comments |
| 1 | Identify Trading Partner (TP) and coordinate with TP for sending/receiving clinical documents using production data as described in this RWT plan. | Confirm Trading Partner Confirm ability to send and receive clinical documents Confirm with TP that production data will be used, whether in an actual live environment or a copy of a live environment | May, 2024 | <input type="checkbox"/> | | |
| * Next steps are Inpatient setting only | | | | | | |
| 2i | Patient A has inpatient admission and discharge and data is captured in the EHR | USCDIV1 data elements captured in EHR (system under test) Care provider is able to create a C-CDA Release R2.1 Discharge Summary Document that also includes discharge instructions Care provider flags the document as restricted and subject to restrictions on re-disclosure | | | | |
| 3i | Care provider initiates TOC in EHR | Care provider selects the recipient from directory of Direct addresses and initiates sending of Clinical Document. Care provider creates a C-CDA Release 2.1 Discharge Summary Document that also includes the discharge instructions. | June, 2024 | <input type="checkbox"/> | | |



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| | | Care provider review the Direct Status screen (under Direct Outgoing menu choice) to ensure Clinical Document was successfully transmitted | | | | |
| *Next steps take place in trading partner's EHR | | | | | | |
| 4 | Validate the C-CDA for Patient A contains USCDiv1 data elements | Recipient uses scorecard to grade C-CDA | June, 2024 | <input type="checkbox"/> | | |
| 5 | Trading partner refers Patient B from TP EHR to system under test by generating C-CDA Clinical Document or Referral Note | Care provider flags Social History section of C-CDA as restricted. Care provider selects recipient from directory of Direct addresses and initiates sending of Clinical Document. | | | | |
| 6 | In system under test, tester acknowledges receipt of valid Clinical Document. | Tester uses Document Center to locate Clinical Document. Care provider reviews the Direct Status screen (under Direct Outgoing menu choice). Recipient validates that Social History section of C-CDA is flagged as restricted | July, 2024 | <input type="checkbox"/> | | |
| 7 | Calculate and compile metrics | | August, 2024 | <input type="checkbox"/> | | |

| Table of Contents | Associated Certification Criteria: § 170.315(b)(10) Electronic Health Information export | | |
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| | Measure Description: Export USCDiv1 clinical data for a population of patients for use in different health information technology product or third party system. This export can be used for many purposes, including data portability when physician practice switches to a new EHR platform. | Justification: We chose to concentrate on the aspects of this criterion that would: 1) demonstrate ConnectEHR's ability to export batches of patient data in straightforward fashion. 2) facilitate interoperability by providing the exported data in the form of valid CCDAs that conform to the HL7 standards as described in the HL7 Implementation Guide for CDA Release 2: Consolidated CDA Templates for Clinical Notes (US Realm). | |
| | Metric Description: 1) C-CDA count matches actual patient count for requested date range. 2) 50% of spot-checked C-CDAs pass scorecard with overall grade of "C" or better. | Standard Implemented: (SVAP) 1) USCDiv1 July 2020 Errata 2) HL7 C-CDA R2.1 Implementation Guide, October 2019. CDAR2_IG_C-CDAA_CLINNOTES_R1_DSTU2.1_2015_AUG_2019JUNwith_errata | |
| | Developer Info: DYNAMIC HEALTH IT, INC. 320 Monticello Ave. New Orleans, LA 70121 504.309.9103 | Product Info: Product Name: Juno ConnectEHR Product Version: 22 CHPL ID: | Methods Use to Demonstrate Interoperability: 1) Visual validation/counting 2) Test output file with C-CDA scorecard to ensure correct format/contents. |



| | | 15.04.04.2925.CONN.04.04.0.230427 | | | | |
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| Test Step: | Testing Procedure: | Expected Outcomes: | Key Milestone Date: | Key Milestone: | Outcome: | Comment(s) |
| 1 | Using production data in an actual live environment, demonstrate the ability to configure data export configurations for Timeframe and Location | Date and time ranges can be configurable via the UI Targeted Practices can be configurable via the UI Patients exported can be configurable via the UI | Start test plan execution: Mary, 2024 | <input type="checkbox"/> | | |
| 2 | Demonstrate the ability to limit the set of users who can create export summaries | Logging in as a VendorAdmin will allow access to the export functionality | | | | |
| 3 | Confirm users roles that have been denied export summary access cannot create export summaries | Logging in as a non-VendorAdmin will not allow access to the export functionality | | | | |
| 4 | Create and validate an export for a single patient | Use the Edge Test Tool to check validity of output file | June, 2024 | <input type="checkbox"/> | | |
| 5 | Create an export summary for data within the entered date and time range | Data was available for the entered date and time range The export summary contained in data only within that date and time range | | | | |
| 6 | Create an export summary in real time | Export summary was created and completed successfully | July, 2024 | <input type="checkbox"/> | | |
| 7 | Save the export summary to a preferred location at the time of export. | Saving to a preferred location is allowed Visually confirming the export after save is performed and successful | | | | |
| 8 | Calculate and compile metrics | | Complete test execution: August, 2024 | <input type="checkbox"/> | | |

| Table of Contents | Associated Certification Criteria: § 170.315(f)(1) Transmission to immunization registries | |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Measure Description: Create and transmit immunization information. Enable a user to request, access, and display a patient's evaluated immunization history and the immunization forecast from an immunization | Justification: We chose to concentrate on the aspects of this criterion that would provide the most patient care value in an actual setting. Immunization registries can be very helpful in directing and informing patient care and in cost control through identification of needed immunizations and elimination of redundant immunizations. In our experience, most immunization registries do not yet have the ability to handle a bi-directional query/response type of interface. That's why we offered an Alternate Test Approach. |



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| | registry. | <p>Metric Description:</p> <p>1) 100 percent correct immunization records successfully posted to registry confirmed by visual validation.</p> <p>2) 100 percent correct immunization history records successfully received in EHR confirmed by visual validation.</p> <p>3) Successful Transmission to Public Health Registry will be reviewed for ACK & NAK to ensure 100% successful transmission.</p> | | | | |
| | <p>Developer Info:</p> <p>DYNAMIC HEALTH IT, INC. 320 Monticello Ave. New Orleans, LA 70121 504.309.9103 Care Setting: Ambulatory/Inpatient The functionality for the criteria is the same regardless of the care setting.</p> | <p>Product Info:</p> <p>Product Name: Juno ConnectEHR Product Version: 22</p> <p>CHPL ID: 15.04.04.2925.CONN.04.04.0.230427</p> | <p>Methods Use to Demonstrate Interoperability:</p> <p>1) SFTP 2) TCP/IP 3) Webservice 4) HL7 Standard Code Set CVX – Vaccines AdministeredOID: 2.16.840.1.113883.12.292 5) National Drug Code Directory OID: 2.16.840.1.113883.6.69 6) SOAP-based standard for transport of immunization data</p> | | | |
| Test Step: | Testing Procedure: | Expected Outcomes: | Key Milestone Date: | Key Milestone: | Outcomes: | Comment(s) |
| 1 | Identify Trading Partner (TP) and coordinate with TP for transmitting immunization records using production data as described in this RWT plan | <ul style="list-style-type: none"> Has a state immunization registry that is enabled for bi-directional send/receive of immunization data. Already has a functional bi-directional immunization interface or would like to implement one to their registry. If we are unable to find a Client that meets these criteria, we will use the Alternate Test Procedure (see below). | May, 2024 | <input type="checkbox"/> | | |
| 2 | Implement bi-directional immunization interface (if interface not already in place) | Validate that immunization interface is functioning as expected | June, 2024 | <input type="checkbox"/> | | |
| 3 | Determine whether test or production interface will be used. | If production, determine whether an actual patient or a test patient will be used. | | | | |
| 4 | Create a new immunization record | <ul style="list-style-type: none"> Register a patient or create a new patient “A” in Client EHR and create a current patient encounter. | | | | |



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| | | <ul style="list-style-type: none"> Record an immunization in Client EHR. | | | | |
| 5 | Create a new query | <ul style="list-style-type: none"> Select a patient or create a new patient "B" in Client EHR and create a current patient encounter. Request immunization record in Client EHR. | | | | |
| 6 | Run immunization process to send/receive from registry (assuming process is batch, rather than real-time). | Confirm send/received functionality | | | | |
| 7 | Access registry to verify that immunization data was received for patient A. | Verify immunization data was received in registry for patient A | July, 2024 | <input type="checkbox"/> | | |
| 8 | Access EHR to verify that immunization data was received for patient B. | Verify immunization data was received in EHR for patient B | July, 2024 | <input type="checkbox"/> | | |
| 9 | Calculate and compile metrics | See above | August, 2024 | <input type="checkbox"/> | | |
| *Alternate Test Procedure (Bi-Directional Interface to Registry Not Available) | | | | | | |
| 1 | Identify Trading Partner (TP) and coordinate with TP for transmitting immunization records using production data as described in this RWT plan. | <ul style="list-style-type: none"> Has a state immunization registry that can receive immunization data Already has a functional immunization interface or would like to implement one to their registry | May, 2024 | <input type="checkbox"/> | | |
| 2 | Implement send-only immunization interface (if interface not already in place) | Validate that immunization interface is functioning as expected | June., 2024 | <input type="checkbox"/> | | |
| 3 | Determine whether test or production interface will be used. | If production, determine whether an actual patient or a test patient will be used | | | | |
| 4 | Create a new immunization record | <ul style="list-style-type: none"> Register a patient or create a new patient "A" in Client EHR and create a current patient encounter Record an immunization in Client EHR | | | | |
| 5 | Run immunization process to send to registry (Note: This is an optional step for batch process registry transmission, rather than real-time). | Confirm immunization process | | | | |
| 6 | Access registry to verify that | Verify that immunization data was | July, 2024 | <input type="checkbox"/> | | |



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| | immunization data was received for patient A. | received for patient A | | | | |
| 7 | Calculate and compile metrics | | August, 2024 | <input type="checkbox"/> | | |

| Table of Contents | Associated Certification Criteria: § 170.315(f)(1) Transmission to public health agencies – syndromic surveillance | | | | | |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------|------------|
| | Measure Description: Create syndromic surveillance messages and transmit to public health agencies. | Justification: We chose to concentrate on the aspects of this criterion that would: 1) Ensure all patients flagged will have health data sent for surveillance 2) Allow for health threats to be reported faster. 3) Provide information to the CDC or other registries to identify illness clusters early, before diagnoses are confirmed and report to public health agencies, and to mobilize a rapid response, thereby reducing morbidity and mortality. | | | | |
| | Metric Description: 1) 100 percent of HL7 Syndromic Surveillance messages successfully sent and acknowledged (via HL7 ACK) by public health agency 2) 100 percent of syndromic surveillance messages successfully received and processed by public health agency based on either: a) logging into agency web site and validating, or b) using a report provided by agency | Standards Implemented: 1) §170.205(e)(4) HL7 2.5.1 Implementation Specifications. HL7 2.5.1 Implementation Guide for Immunization Messaging, Release 1.5, October 2014 2) HL7 Version 2.1.5 Implementation Guide for Immunization Messaging (Release 1.5) – Addendum, July 2015 §170.207(e)(3) HL7 Standard Code Set CVX – Vaccines Administered, Updates through August 17, 2015 3) §170.207(e)(4) National Drug Code (NDC) Directory – Vaccine NDC Linker, updated through August 17, 2015 | | | | |
| | Developer Info: DYNAMIC HEALTH IT, INC. 320 Monticello Ave. New Orleans, LA 70121 504.309.9103 Care setting: Ambulatory/Inpatient The functionality for the criteria is the same regardless of the care setting. | Product Info: Product Name: Juno ConnectEHR Product Version: 22 CHPL ID: 15.04.04.2925.CONN.04.04.0.230427 | Methods Use to Demonstrate Interoperability: 1) ICD-10-CM 2) SNOMED CT® 3) SFTP 4) TCP/IP 5) Webservice | | | |
| Test Step | Testing Procedure | Expected Outcomes: | Key Milestone Dates: | Key Milestone: | Outcomes: | Comment(s) |
| 1 | Identify DHIT Client who either: • Has a public health agency that can receive Syndromic Surveillance data • Already has a functional | Syndromic surveillance messages are successfully received and processed by public health agency. | May, 2024 | <input type="checkbox"/> | | |



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| | Syndromic Surveillance interface or would like to implement one to their public health agency and the agency willing to share metrics of syndromic surveillance messages successfully received. | | | | | |
| 2 | Implement send-only public health interface (if interface not already in place). <ul style="list-style-type: none"> • Determine whether test or production interface will be used • If production, determine whether an actual patient or a test patient will be used | Functioning HL7 2.5.1 interface to public health agency | June, 2024 | <input type="checkbox"/> | | |
| 3 | Create a new patient encounter. <ul style="list-style-type: none"> • Register a patient or create a new patient "A" in Client EHR and create a current patient encounter • Enter one or more ICD-10 diagnosis codes present in the Trigger Events table that lists reportable Syndromic Surveillance diagnoses | Patient registered and queued for interface | | | | |
| 4 | Run Syndromic Surveillance process to send to public health agency (assuming process is batch, rather than real-time). | <ul style="list-style-type: none"> • Ensure messages are de-identified per CDC PHIN Messaging Guide requirements • Messages sent to public health agency | | | | |
| 5 | Check whether HL7 messages ACKed by agency | HL7 messages are successfully received and ACKed | | | | |
| 6 | Query agency to verify that public health data was received for patient A. | Public health successfully processed by agency | | | | |
| 7 | Calculate and compile metrics | | August, 2024 | <input type="checkbox"/> | | |



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| Table of Contents | Associated Certification Criteria: § 170.315(g)(7) Application Access – patient selection § 170.315(g)(9) Application Access – all data request § 170.315(g)(10) Standardized API for patient and population services | | |
| | Measure Description: Provide a standardized FHIR-based API that supports bulk data requests to provide patients, providers and niche specialty applications to consume patient data enabling improved interoperability, improved patient care and overall population health. | Justification: We chose on the aspects of this criterion that would empower clinicians with flexibility in choosing new and innovative healthcare technology. Historically, it has been difficult for builders of niche applications to access necessary patient demographic and clinical data for smooth, seamless use of their applications. Likewise, clinicians have often felt forced to stick with cumbersome, difficult-to-use EHR technology because of the cost and complexity of migrating their patient data. | |
| | Metric description: 1) 100 percent of encounters where Patient is able to retrieve FHIR API from PHR app. 2) 100 percent of encounters from Step #1 where Patient's PHR data matches data from EHR. This will be done by visual inspection of the following FHIR resources: a. Demographics b. Problems c. Medications d. Allergies 3) 100 percent of encounters where Provider is able to retrieve FHIR API data from app. 4) 100 percent of encounters from Step #3 where data from randomly-selected patients as presented in app matches data in EHR. This will be done by visual validation of the following FHIR resources: a. Demographics b. Problems c. Medications d. Allergies | Standards Implemented: 1) United States Core Data for Interoperability (USCDI), Version 1, July 2020 Errata 2) HL7 Fast Healthcare Interoperability Resources Specification (FHIR®) Release 4, Version 4.0.1: R4, October 30, 2019, including Technical Correction #1, November 1, 2019 3) HL7 FHIR® US Core Implementation Guide STU 3.1.1, August 8, 2020 HL7 FHIR® SMART Application Launch Framework Implementation Guide Release 1.0.0, November 13, 2018 4) HL7 FHIR® Bulk Data Access (Flat FHIR®) (v1.0.0: STU 1), August 22, 2019 5) OpenID Connect Core 1.0 Incorporating errata set 1, November 8, 2014, IBR approved for §170.215(b) | |
| | Developer Info: DYNAMIC HEALTH IT, INC. 320 Monticello Ave. New Orleans, LA 70121 504.309.9103 Care setting: Ambulatory/Inpatient | Product Info: Product Name: Juno ConnectEHR Product Version: 22 CHPL ID: 15.04.04.2925.CONN.04.04.0.230427 | Methods Use to Demonstrate Interoperability: 1) US Core FHIR Resources 2) SMART Patient Launch 3) SMART EHR Launch 4) Backend Services Authorization 5) Visual validation |



| The functionality for the criteria is the same regardless of the care setting. | | | | | | |
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| Test Step: | Testing Procedure: | Expected Outcomes: | Key Milestone Date: | Key Millstone: | Outcomes: | Comment(s) |
| These Test Steps Cover Single Patient API Access | | | | | | |
| 1 | Identify Trading Partner (TP) and coordinate with TP for providing patients timely access to their ePHI using production data as described in this RWT plan. | <ul style="list-style-type: none"> Partner with PHR or identify existing PHR that can receive patient clinical data as described in this RWT plan. We recommend MyLinks (https://www.mylinks.com/) Ensure that PHR has functionality to access the Dynamic FHIR API, as described here. Partner with EHR that is integrated with the Dynamic FHIR API and Patient Portal modules of ConnectEHR. | May, 2024 | <input type="checkbox"/> | | |
| 2 | Patient A has encounter with care provider who uses EHR described above. | Encounter is created and visually confirmed | June, 2024 | <input type="checkbox"/> | | |
| 3 | Provider captures USCDIv1 data elements in EHR | USCDIv1 data elements are validated in the system | | | | |
| 4 | Provider manually generates Care/Referral Summary C-CDA post-visit or ensures that the EHR generates one automatically. | C-CDA is confirmed for the specified patient | | | | |
| 5 | Patient A uses Dynamic Patient Portal login to view clinical information. | <ul style="list-style-type: none"> Patient Portal automatically sends email reminder that Patient A has a new clinical document available. Email reminder has a URL/hyperlink to the patient portal. If patient hasn't already activated their portal account, portal account can be activated via Welcome Email or by an Administrator user | | | | |
| 6 | Patient A uses portal login credentials to log into PHR app | Specific patient ID and token are returned for authentication and data requests | | | | |



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| 7 | PHR app displays full set of data for each data category. | <ul style="list-style-type: none"> • Dynamic FHIR API has transformed C-CDA into FHIR resources. • PHR app consumes FHIR resources to populate EHR data | July, 2024 | <input type="checkbox"/> | | |
| 8 | PHR app returns full set of data for a given category | PHR app will display and all data to be displayed for each data category | | | | |
| 9 | PHR app returns data in a computable format using specified standards. | Data is confirmed to be in XML or JSON format | | | | |
| 10 | PHR app returns full and accurate data for a specific date and specific date range | <ul style="list-style-type: none"> • Step 10 is optional, if PHR app has the capability to filter by date range • Filtering data by a specific date returns data accurately and as expected • Filtering data by a specific date range returns data accurately and as expected | | | | |
| 11 | Via visual inspection, the data is verified to include Assessment, Plan of Treatment and Health concerns are specified as narrative text | Visually validate Assessment, Plan of Treatment and Health Concerns narrative text | | | | |
| These Test Steps Cover Care Coordination via 3rd Party App | | | | | | |
| 1a | Identify Trading Partner (TP) and coordinate with TP for providing patients timely access to their ePHI using production data as described in this RWT plan. | <ul style="list-style-type: none"> • Partner with a provider-centric app for improved patient care (e.g. growth charts, clinical decision support, patient charting). • Ensure that app has functionality to access the Dynamic FHIR API, as described here. • Partner with EHR that is integrated with the Dynamic FHIR API module of ConnectEHR. | May, 2024 | <input type="checkbox"/> | | |
| 2a | Provider logs into app and triggers FHIR API data retrieval | • The app connects to the FHIR API server and pulls down the specific FHIR resources from the EHR | | | | |
| 3a | Provider views and validates data in app | • Data is rendered correctly: Provider compares patient data in app to patient data in EHR and notes any | June, 2024 | | | |



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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------------|--|--|
| | | discrepancies. | | | | |
| These Test Steps Cover Bulk Data for Care Coordination | | | | | | |
| 1b | Identify Trading Partner (TP) and coordinate with TP for providing patients timely access to their ePHI using production data as described in this RWT plan. | <ul style="list-style-type: none"> Partner with a provider-centric app that requires periodic bulk data downloads. Ensure that app has functionality to access the Dynamic FHIR API, as described here. Partner with EHR that is integrated with the Dynamic FHIR API module of ConnectEHR. | May, 2024 | <input type="checkbox"/> | | |
| 2b | Provider logs into app and views patient data. | <ul style="list-style-type: none"> The app connects to the FHIR API server and pulls down the specific FHIR resources from the EHR | | | | |
| 3b | Provider validates data in app | <ul style="list-style-type: none"> Data is rendered correctly: Provider compares patient data in app to patient data in EHR and notes any discrepancies. | June, 2024 | <input type="checkbox"/> | | |
| 12 | Calculate and compile metrics | | August, 2024 | <input type="checkbox"/> | | |
| Attestation: This Real World Testing plan is complete with all required elements, including measures that address all certification criteria and care settings. All information in this plan is up to date and fully addresses the Health IT Developer's Real World Testing requirements. | | | | | | |
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