eCR Now
COVID-19 Challenge

Webinar II
The eCR Now FHIR App

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This webinar is being recorded

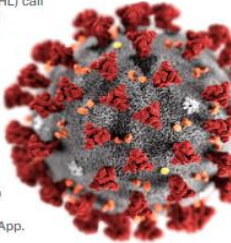
The Association of Public Health Laboratories presents
The eCR Now COVID-19 Challenge
FHIR®-Up Your EHR to Help Manage the Spread

APHL

The *eCR Now* initiative and the Association of Public Health Laboratories (APHL) call on healthcare organizations to implement electronic case reporting (eCR) for COVID-19 and other diseases. Public health agencies need more timely and complete data. Hospitals, healthcare systems, ambulatory practices, and their partners can increase the implementation of eCR through participation in the *eCR Now COVID-19 Challenge*.

The Challenge will increase the number of electronic health records (EHRs) enabled with eCR capabilities by use of the eCR Now FHIR® App and the HL7 FHIR® standard. The App enables eCR, helps meet legal reporting requirements, fulfills CMS' Promoting Interoperability Program requirements, and moves public health in our nation forward.

The *eCR Now COVID-19 Challenge* will make up to three awards of $100,000 and three awards of $60,000 to eligible participants that accomplish production electronic case reporting for COVID-19 using the eCR Now FHIR® App.

Successful participants must implement the eCR Now FHIR® App in production healthcare operations by April 16, 2021.

PARTICIPATE

1. **Express Intent:** By **January 15, 2021,** email your interest in participating to eCR-info@aimsplatform.org.

2. **Attend Challenge Webinars:** Participate in informational webinars being held on **November 19, 2020** and **December 1, 2020.**

3. **Implement:** Complete implementation of the eCR Now FHIR® app for production COVID-19 electronic case reporting from one or more clinical care sites **by April 16, 2021.**

4. **Notify:** Submit the required application material **by April 16, 2021.**

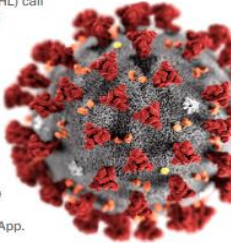To learn more about eligibility criteria and more, visit the AIMS **eCR website.**

The eCR Now COVID-19 Challenge is made possible by funding from the CDC Foundation.

Today's Agenda

- Background on eCR Now and the Challenge

- eCR Now FHIR App
  - Hosting

- eCR Now FHIR App Integration points
  - eRSD
  - App launch
  - EHR queries
  - Sharing eICRs and RRs

- Q and A

Challenge and eCR Now Context

- Please see the eCR Now Covid-19 Challenge web page:
  https://ecr.aimsplatform.org/ecr-now-covid-19-challenge

- And the recording of Webinar I (linked on this page) for information on the fuller context of electronic case reporting (eCR), the eCR Now initiative, and the eCR Now Challenge

- At the end of this presentation will be additional information on contacting the eCR Now FHIR App team as well as Challenge participant next steps

eCR Infrastructure

Triggering Set-Up

Provider (EHR)

eCR Now FHIR App

eICR

RR

Health Information Exchange (HIE) and / or eHealth Exchange / Carequality Trust Framework with / or without DirectTrust

eRSD

CSTE / CDC Decision Support Engine (RCKMS)

APHL Platform (AIMS)

Provider (EHR)

eICR

RR

eICR

RR

Public Health Agency

Where care was provided

eICR

RR

Public Health Agency

Patient residence
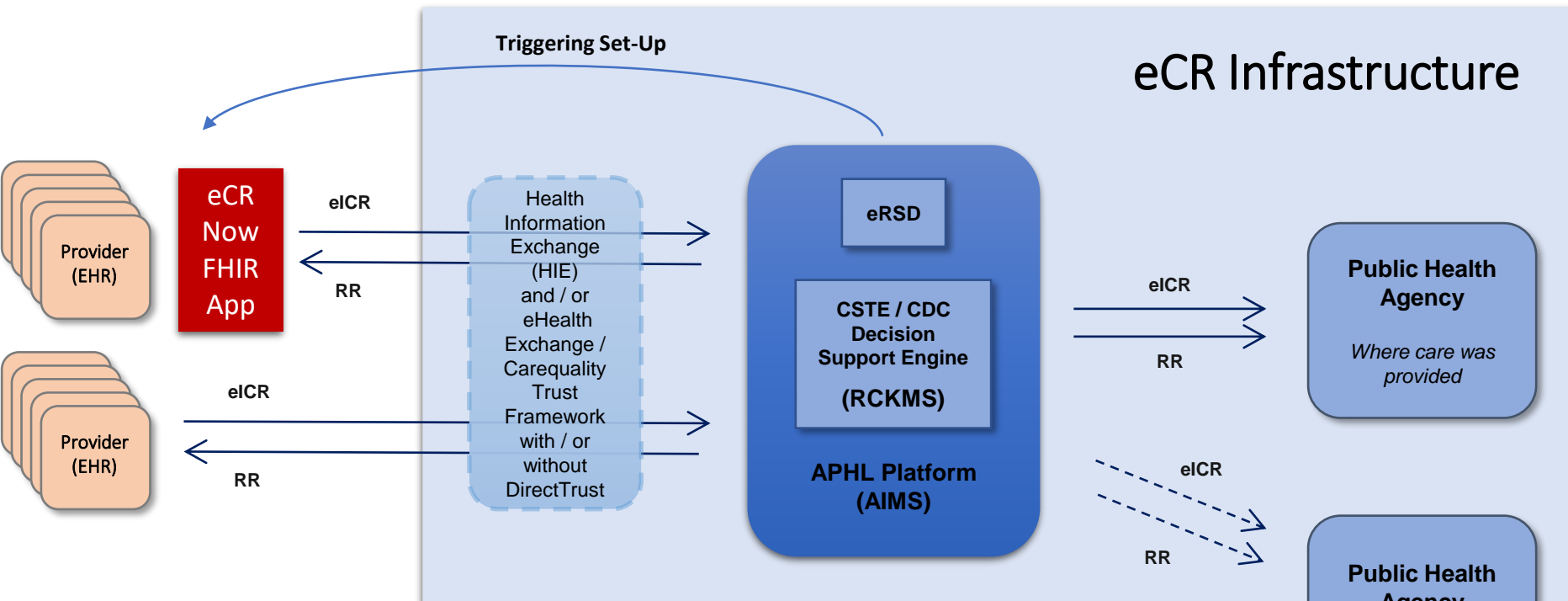
Terms

RCKMS - Reportable Conditon Knowledge Management System

eRSD – Electronic Reporting and Surveillance Distribution System

Possible Policy Agreements

eHealth Exchange, Carequality, APHL participation agreement

HL7 Standards

eICR - Electronic Initial Case Report CDA v1.1

RR - Reportability Response CDA v1.0
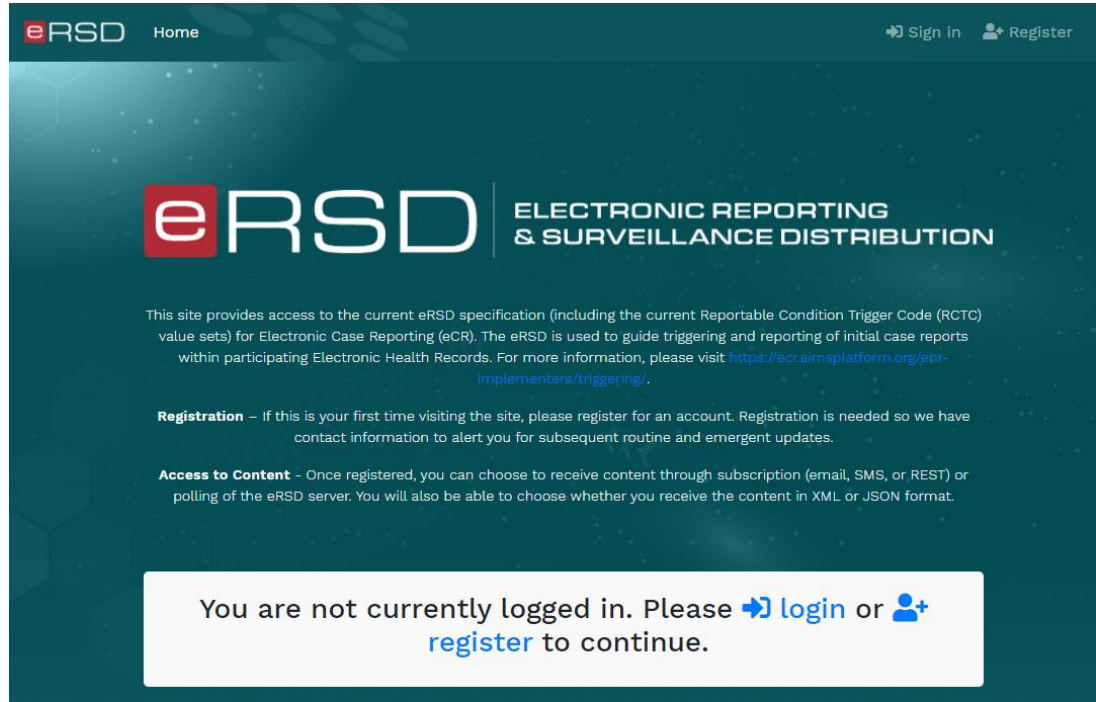
eCR Now FHIR App

- App can be hosted locally, in the cloud, or at a third-party site
- App and source code at GitHub site
  - github.com/drajer-health/eCRNow
- We will talk through several app "integration points"
  - The electronic surveillance and reporting distribution (eRSD)
  - App launch
  - EHR queries
  - Sharing electronic initial case reports (eICRs) and reportability responses (RRs)
- We will now share a number of details about the eCR Now FHIR app, but please realize that the app handles many of these for you

The electronic surveillance and reporting distribution (eRSD)

App consumes the entire eRSD download to configure and manage triggering

App configuration:

- COVID-19 only electronic case reporting

   or

- Full electronic case reporting

eICR Triggering and Transmission Guidance

Start |----------- Encounter ----------| End

-- 1 hr. --|

---- 24 hrs. ----|

Trigger check - send eICR if match

New trigger checks – send eICR if matches **(every 6 hours)**

Send eICR if there have been previous trigger(s) during the encounter **(every 24 hours)**

Send eICR after the encounter ends if there have been trigger(s) during the encounter
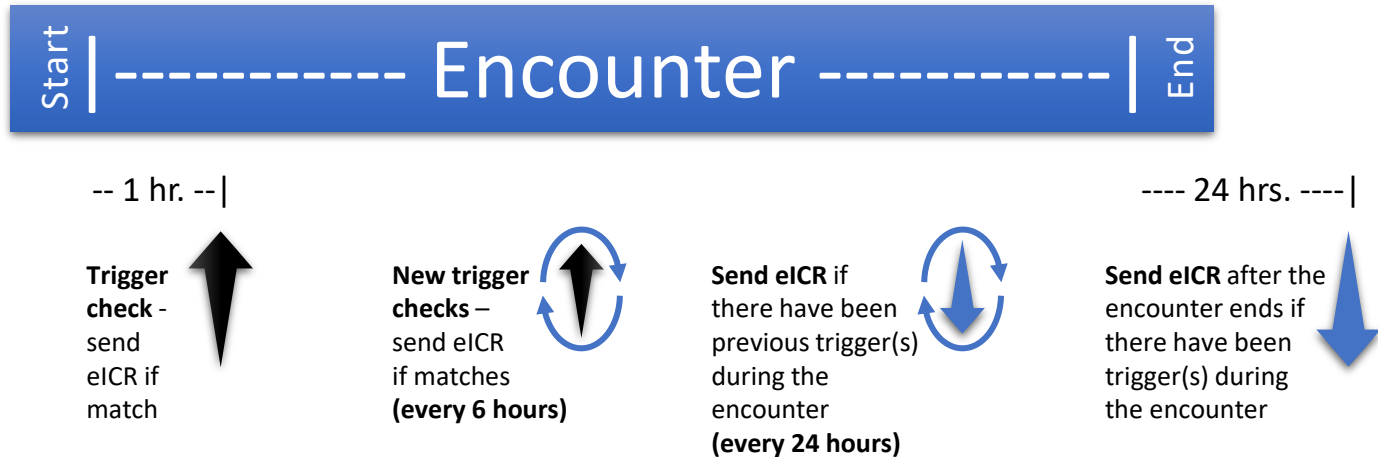
(Specific time values are set in eRSD)

App Launch

- App is intended to run in the background
  - Does not have a user interface
- Can be launched in two ways:
  - System launch
    - Needs to get context of provider, patient, and encounter

  or

  - SMART on FHIR Provider App Launch
    - Has context, needs to be launched consistently and, ideally, automatically

EHR Queries

- App implements two versions of FHIR API:
    - DSTU2

    or
    - R4

- Trigger queries
    - Minimally burdensome to EHR

- Loading queries
    - Populate the CDA eICR 1.1

- FHIR queries to CDA eICR mapping spreadsheets available on GitHub site

Sharing Electronic Initial Case Reports (eICRs) and Reportability Responses (RRs)

- App sends out CDA eICR r1.1 and stores them in app database
  - Implements SMTP Direct
  - API support of XDR
- App receives and sorts the Reportability Responses
  - Providers should have access to those that reference "Reportable" conditions and those that reference "May be Reportable" conditions
- FHIR Document Reference submission of Reportability Response
- RESTful APIs

Next Steps

- Express Intent by January 15th, 2021

- Technical questions can be submitted to the:
  - [Zulip thread](#)

- Other questions can be submitted to:
  - eCR-Info@aimsplatform.org

- Sandbox test in HL7 FHIR Connectathon January 13th to 15th, 2021 (Optional)

- Complete operational implementation by April 16th, 2021

- Submit Application by midnight April 16th, 2021