

eCR Now

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Electronic case reporting (eCR)

The automated identification of reportable health events in electronic health records and their transmission to state and local public health authorities for review and action.

eCR Now Connectathon Prep Call

- Context
- Resources
- Integration points
- Scenarios and testing
- Feedback and schedule

eCR Now

- Electronic case reporting (eCR) is a critical tool for COVID-19 and other outbreak management needs
 - Provides critical patient, demographic, and clinical data for management at state and local public health agencies and for reporting to the CDC
 - Supports case management, contact tracing, situational awareness and reporting, connecting lab results, coordinating isolation and other response measures
- eCR is operating well now for COVID-19, but there were a limited number EHRs with eCR capabilities when COVID-19 began
- We need more implementations of eCR Now

eCR Now Elements

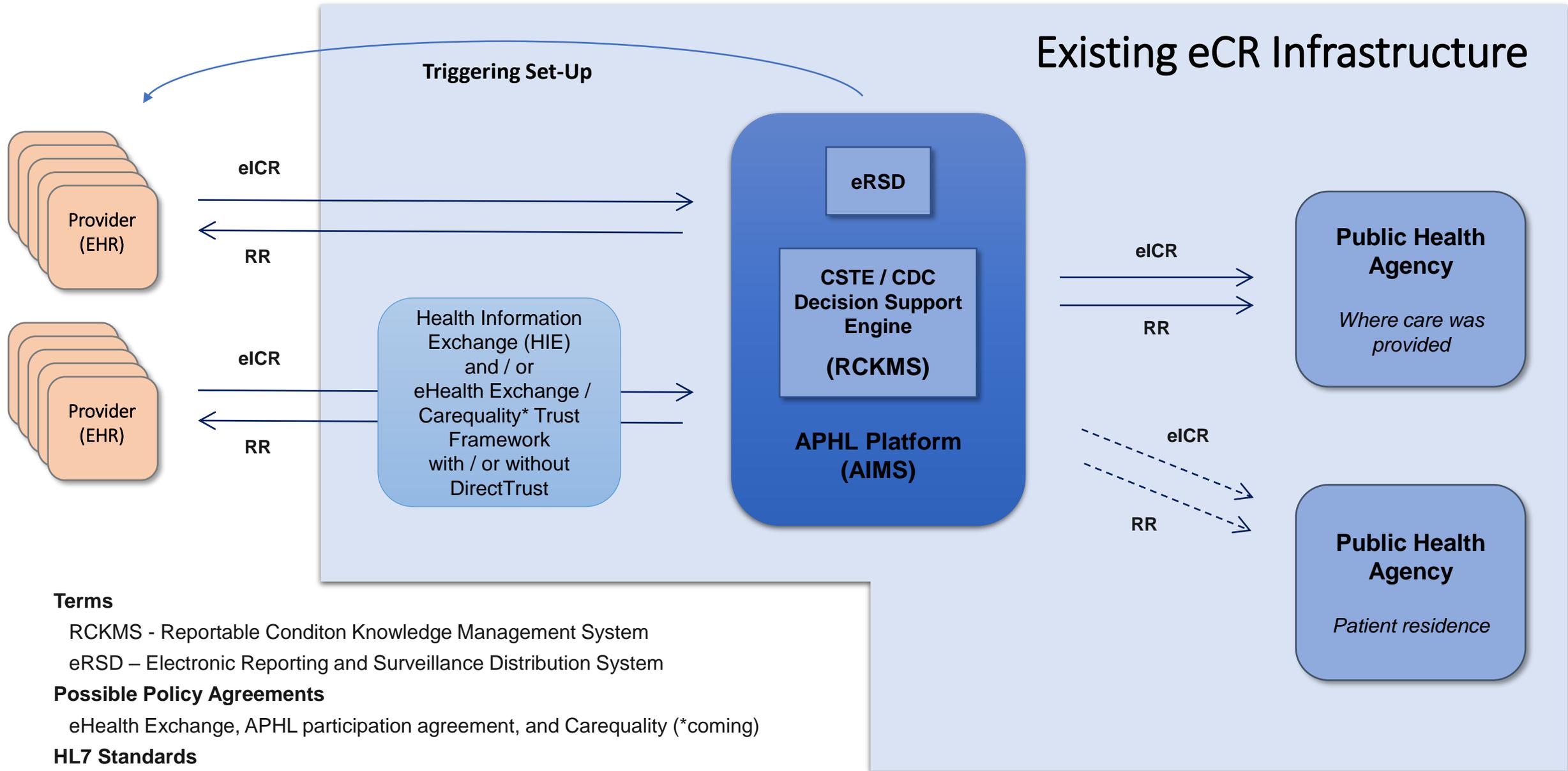
1. Cohort-based COVID-19 rapid eCR implementations for provider sites that already have eCR enabled EHRs
2. A new eCR Now FHIR App that non-eCR enabled EHRs can rapidly implement to automate COVID-19 eCR
3. Extension of the existing eHealth Exchange policy framework through a developing Carequality eCR implementation guide for ease of on-boarding

eCR Now FHIR App – Element 2

- A FHIR app that can be rapidly implemented to automate COVID-19 eCR in otherwise non-enabled EHRs
- Immediately implement in as many EHRs as possible, based on API that is “in the wild” without waiting for EHR software releases
- Connect COVID-19 electronic case reporting to existing infrastructure to confirm case reports and route to appropriate public health surveillance systems
- Can be configured for full electronic case reporting as well as COVID-19
- Initial version of eCR Now app for COVID-19 and source code available EHR sandbox implementation and testing

eCR Now - FHIR Reporting App

	eCR Now COVID-19 and full eCR option	Backend Services App	Reporting Services in FHIR API
Description	<i>Expedited delivery of app to provide automated COVID-19 eCR for EHRs that don't have it. App can be used subsequently for full eCR.</i>	<i>Planned roll-out of app with fully automated launch, trust services, and other reporting functions</i>	<i>Advance FHIR Common Reporting Functions into FHIR API – all EHRs must report</i>
Timing	App / source code available May 1	Projected for 2021	Longer term objective
Output	HL7 CDA electronic Initial Case Report (eICR) Ver 1.1	HL7 FHIR electronic Initial Case Report Version 1.0 and other FHIR payloads	Multiple FHIR payloads
Operations	<ul style="list-style-type: none"> • Fully manages triggering with eRSD input • Automated behind the scenes process • “SMART on FHIR App launch” for patient and encounter context • App launch by auto pages, CDS Hooks, etc. • Followed by system access for triggering and eICR loading or refresh tokens • Backend can be centrally hosted by EHR • Direct or XDR transport 	<ul style="list-style-type: none"> • Full backend services app • Trust services for chronic surveillance • FHIR Subscription triggering • CQL engine connection 	<ul style="list-style-type: none"> • Minimized app services • Possible CQL engine services
Query Data	<ul style="list-style-type: none"> • Argonaut 1.0.0 (R2) based on FHIR Version 1.0.2 • USCore 2.0.0 (STU 2) based on FHIR Version 3.0.1 	<ul style="list-style-type: none"> • FHIR Release 5 • USCore 	<ul style="list-style-type: none"> • TBD



Terms

- RCKMS - Reportable Conditon Knowledge Management System
- eRSD – Electronic Reporting and Surveillance Distribution System

Possible Policy Agreements

eHealth Exchange, APHL participation agreement, and Carequality (*coming)

HL7 Standards

- eICR - Electronic Initial Case Report CDA v1.1
- RR - Reportability Response CDA v1.0

Resources

- Web
 - App page on eCR website
 - <https://ecr.aimsplatform.org/ecr-now-fhir-app>
- Connectathon
 - Public health track
 - <https://confluence.hl7.org/display/FHIR/2020-05+Public+Health+Track>
- Zulip
 - Connectathon working thread and questions
 - <https://chat.fhir.org/#narrow/stream/236764-eCR-Now.20FHIR.20App>
- GitHub
 - App and source code
 - <https://github.com/drajer-health/eCRNow>
- eRSD
 - Electronic Reporting and Surveillance Distribution system
 - <https://ersd.aimsplatform.org/#/home>

Connectathon Scenarios

Integration Points

- Launch
 - Automating launch
 - obtaining patient and encounter context
 - launching the background app process
- eRSD
 - Manual sign-off and automated consumption
 - obtaining up-to-date trigger codes and parameters from the electronic Reporting and Distribution (eRSD) system
- Queries
 - Trigger and loading
 - Improve efficiencies
 - Customization as needed
 - implementing specific trigger and loading queries

Integration Points

- Exchange
 - Direct and XDR
 - Testing with platform and eHealth Exchange hub
 - transporting electronic Initial Case Reports (eICRs) out to the APHL AIMS platform
- local storage of eICRs that have been sent
- receipt, processing, and local storage of the Reportability Response that comes back to the EHR for each eICR that has been sent

eCR Now Draft App Schedule

- First Release (Pre-Alpha)
 - May 1, 2020
- Second Release (Alpha-Pre-Connectathon)
 - May 8, 2020
- Implementor testing in HL7 Connectathon Public Health Track
 - May 13-15, 2020
- Third Release (Post-Connectathon)
 - by May 29, 2020