eCR Now: Accelerating Implementation for COVID-19

Laura A. Conn, MPH
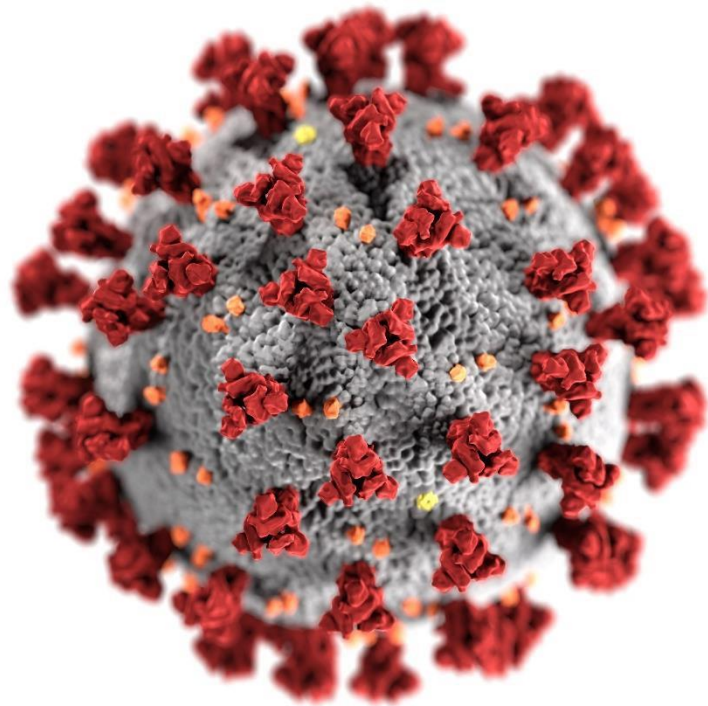
eCR Lead, Health Scientist, CSELS, CDC

Adi V. Gundlapalli, MD PhD MS

Chief Public Health Informatics Officer, CSELS, CDC

Health Information Technology Advisory Committee Meeting

April 15, 2020

cdc.gov/coronavirus

Presentation Overview

- Introduction

- What is electronic Case Reporting (eCR)?

- eCR Now: Accelerating eCR implementation for COVID-19

- eCR Now Needs

Introduction

- COVID-19 is now a reportable condition in all jurisdictions

- With widespread community transmission of the virus, SARS-CoV-2, reporting individual cases to public health is challenging

- Need for Health IT tools to

    - Decrease provider and healthcare facility burden in reporting

    - Improve case-based surveillance for state, regional, and federal situational awareness

What is Electronic Case Reporting (eCR)?

The **automated generation** and transmission of case reports from the electronic health record (EHR) to public health agencies for review and action

Value of Electronic Case Reporting (eCR)

Automatic, complete, accurate data in real-time

Diminishes healthcare provider burden and meets public health needs

Supports reporting and situational awareness, case management, contact tracking, connecting lab results, and coordinating isolation and other response actions

Healthcare receives information back from public health

Current Implementers

eCR for COVID-19

- Over 56,000 case reports identified and sent from four eCR implementations since January 28, 2020

- Confirmed cases have been identified from case reports

- Receipt of electronic case reports confirmed faster and more complete than manual reporting and Electronic Laboratory Reports

- A total of 16 jurisdictions have received case reports from the 4 active healthcare providers

eCR Now

eCR Now Elements

1. Cohort-based COVID-19 rapid eCR implementations for provider sites that use an EHR with eCR capabilities

2. An eCR Now FHIR* app that can be immediately implemented to automate COVID-19 eCR in otherwise not enabled EHRs

3. Extension of the existing eHealth Exchange policy framework through a developing Carequality eCR implementation guide

*Fast Healthcare Interoperability Resources

eCR Now - Element 1

- Cohort based onboarding for facilities
  - Epic has streamlined implementation to just 3 days
  - Initial California cohort in process, cohort #2 signing up
- Using FHIR trigger code distribution service (eRSD) – to keep current with evolving codes (ICD, LOINC, SNOMED)
- Confirmed cases delivered for Public Health Agency surveillance – <u>with no manual entry</u> or further burden on healthcare providers or public health

eCR Now - Element 2

- FHIR app that can be rapidly implemented to automate COVID-19 eCR in otherwise non-enabled EHRs

  - Does not require new EHR software release

- Connects COVID-19 eCR to existing infrastructure to confirm cases and route to appropriate public health surveillance systems

- Initial version of eCR Now app for COVID-19 and source code will be available May 1, 2020

Existing Infrastructure
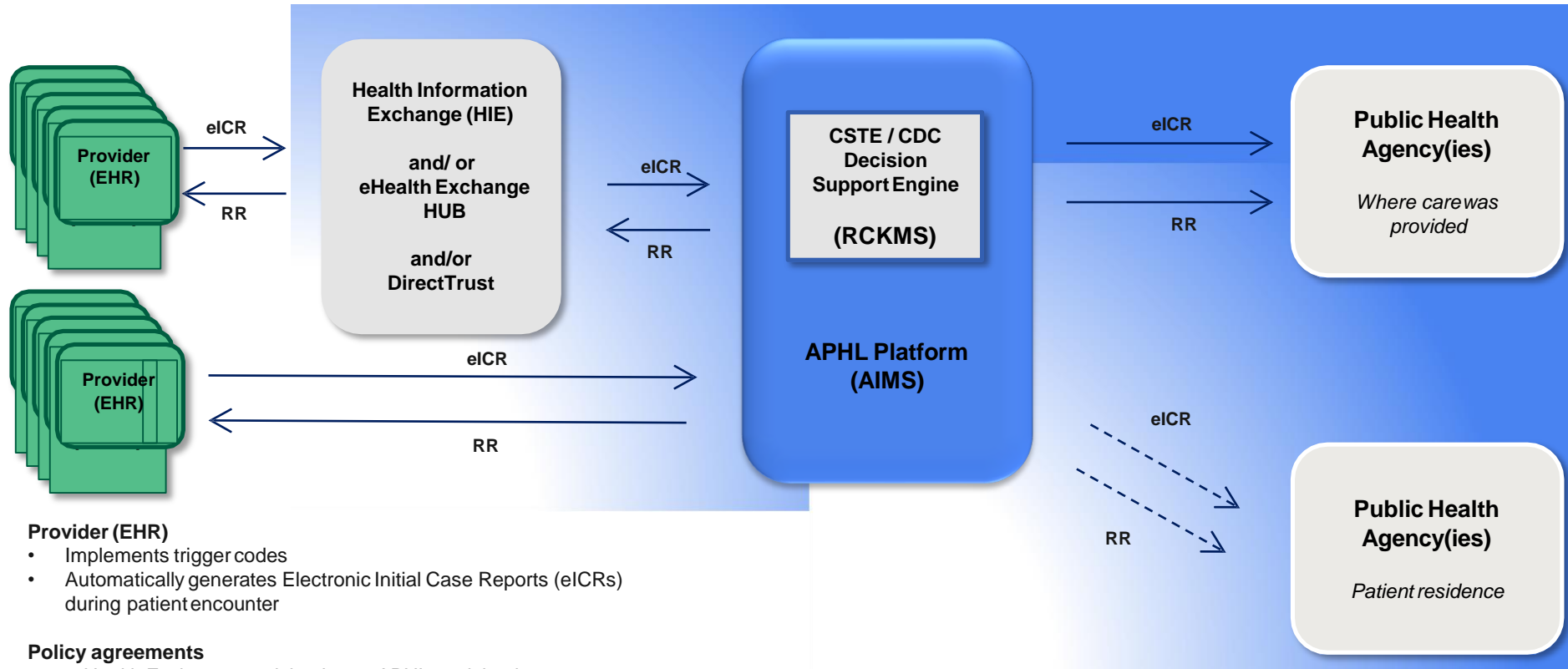
Provider (EHR)
- Implements trigger codes
- Automatically generates Electronic Initial Case Reports (eICRs) during patient encounter

Policy agreements
- eHealth Exchange participation or APHL participation agreement (Carequality also in progress)

HL7 Standards
- Electronic Initial Case Report (eICR) CDA v1.1
- Reportability Response (RR) CDA v1.0

eCR Now - Next steps

- Elevate awareness of eCR Now and app
- Encourage EHR Vendor implementation
- Participate in HL7 FHIR Connectathon (May 2020)
  - In contact with major EHR vendors, reaching out to EHR Association
  - Looking for plenary-like opportunities and other industry communications
- Focus on supporting eCR activities and infrastructure that are in progress – building capacity for routine and response times

Organizing a cohort approach to implementation

To identify your interest in eCR for COVID-19 reporting, please email lconn@cdc.gov with the following information (and pursue appropriate approvals from your organization's leadership).

- Organization name and address
- Who is your primary POC for initial follow-up?
- What version of Epic do you have currently implemented?
- Do you use Direct? (Y/N/DK)
    - IF you know, provide the name of your Direct Messaging Health Information Service Provider (HISP)?
- Are an eHealth Exchange member? (Y/N/DK)
- Are you a Carequality implementer? (Y/N/DK)

Contact Information

Adi V. Gundlapalli, MD, PhD, MS

agundlapalli@cdc.gov

Laura A. Conn, MPH

lconn@cdc.gov

A huge shout-out to the whole eCR Team – staff and contractors at:
- **Association of Public Health Laboratories**
- **Centers for Disease Control and Prevention**
- **CDC Foundation**
- **Council of State and Territorial Epidemiologists**
- **State and local public health agencies**
- **…and a ton of other supporters/implementers.**

Visit us on the Web at: ecr.aimsplatform.org

or by email: ecr-info@aimsplatform.org
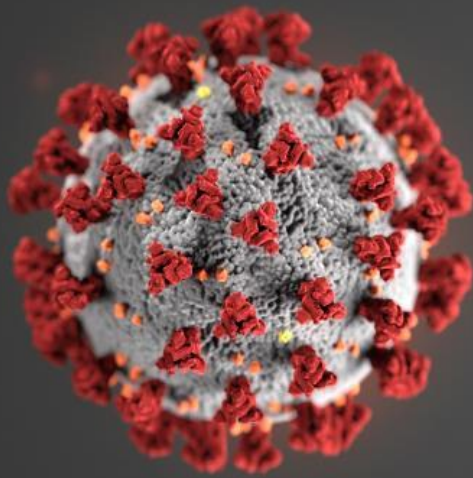
For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348   www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.