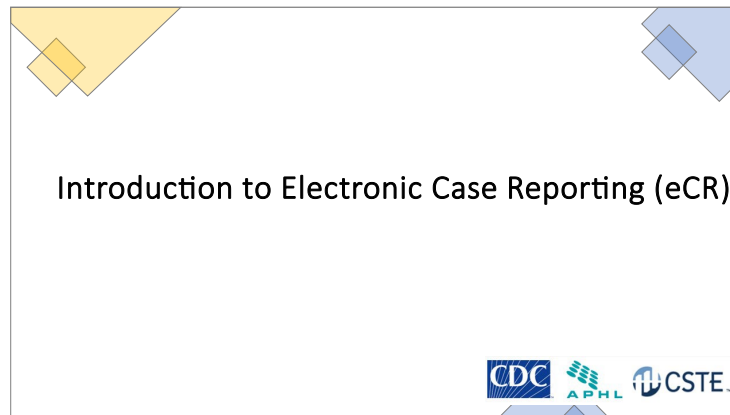


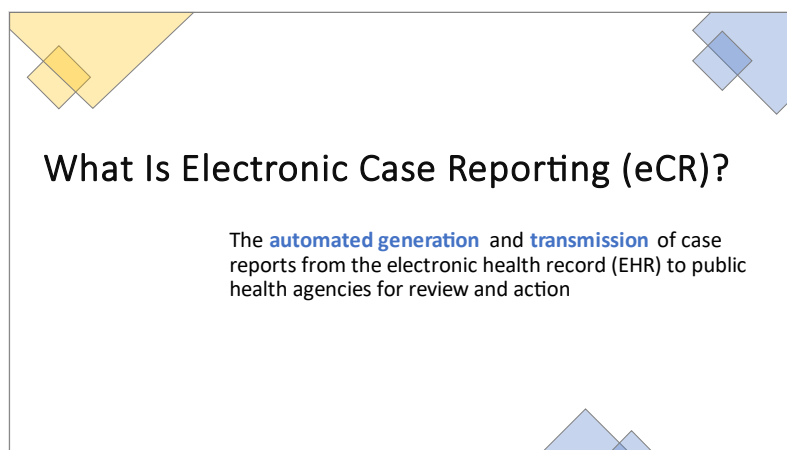
Introduction to Electronic Case Reporting (eCR) – For Healthcare organizations

Last updated: 09/07/2022

The below transcript is intended for use in conjunction with a video file, available at [Healthcare \(aimsplatform.org\)](https://www.healthcare.aimsplatform.org) within the Overview section.



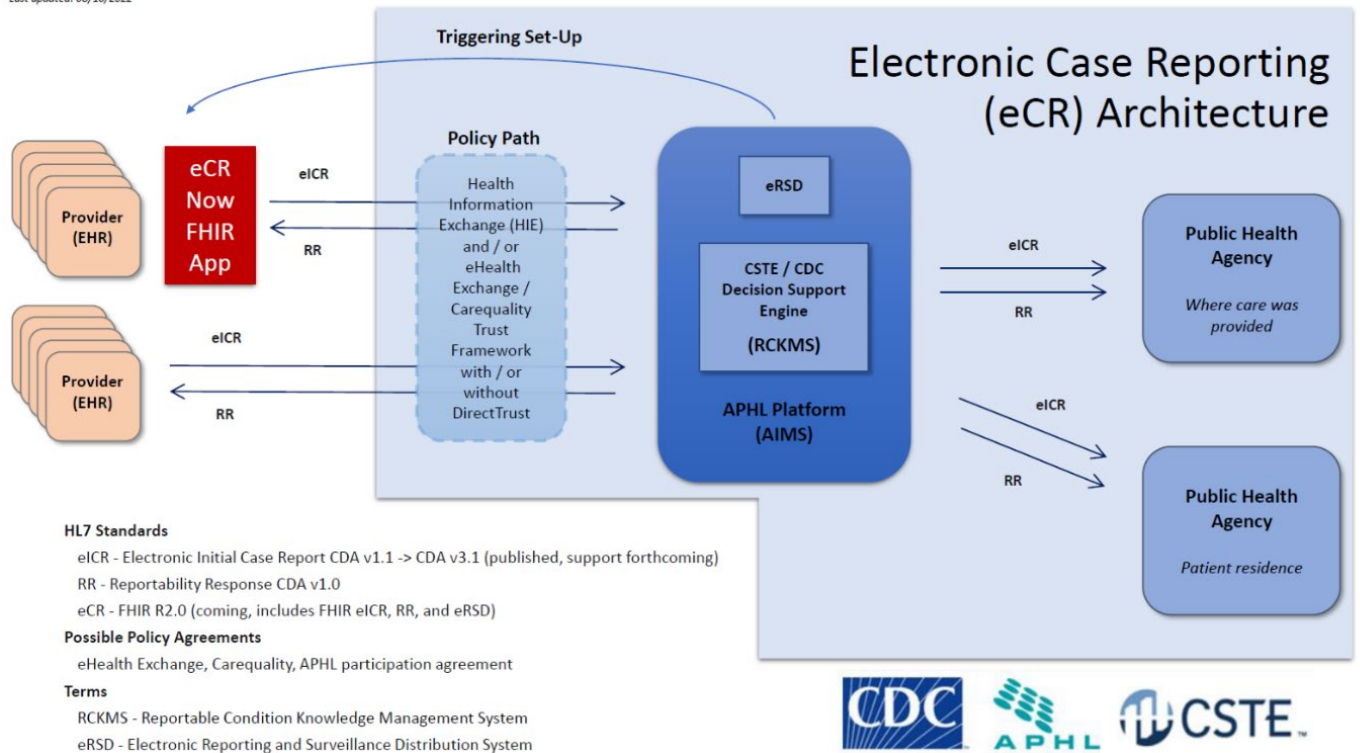
- Welcome to an introduction of electronic case reporting, or eCR. In this video, we will provide a high-level overview of the electronic implementation of case reporting and outline the steps your healthcare organization – or HCO - can take to get started.



- Public health case reporting is required by law in every state and territory. Here, we are discussing the electronic implementation of case reporting, known as eCR. eCR is defined as the automated generation and transmission of case reports that originate from your HCO's Electronic Health Record – or EHR - system and are sent to state and local public health agencies – or PHAs- for review and action.
- eCR is a joint program of the Centers for Disease Control and Prevention (CDC), the Association of Public Health Laboratories (APHL), and the Council of State and Territorial Epidemiologists (CSTE) in support of state, tribal, local, and territorial PHAs.

- There are different requirements for reporting in different jurisdictions, so knowing what, when, where and how to report cases to public health can be difficult to keep up with and often results in the underreporting of cases.
- eCR will handle this variation for you and help you meet your case reporting requirements, while decreasing the burden on providers and staff by automatically sending the report in the background of the EHR workflow and reducing the need for follow-up calls.
- In the 2022 and 2023 Centers for Medicare & Medicaid Services (CMS) published Medicare Promoting Interoperability Program [final rules](#), [one of them](#), the Electronic Case Reporting measure is required as part of the Public Health and Clinical Data Exchange Objective for eligible hospitals and critical access hospitals.
- CMS also published the Merit based Incentive Payment System [final rule](#) requiring the Electronic Case Reporting measure for eligible clinicians [as well](#).
- Both rules took effect on January 1, 2022 and healthcare organizations can start implementing once their EHR product is approved for general availability with eCR.
- CDC has issued guidance that all PHAs connect to and receive eCR data via a shared services platform, the Association of Public Health Laboratories' Informatics Messaging Services, or AIMS, platform.
- All States, DC, Puerto Rico, and several local health departments are currently connected to the AIMS platform to receive eCR data.
- Please direct your PHA's website to learn more about a given jurisdiction's Promoting Interoperability requirements.

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Now, let's turn our attention to the eCR architecture diagram.

- The diagram displayed here gives an overview of how data flow from the HCO's EHR system utilizing the eCR architecture.
- Please note that everything in the light blue box is in production and is in use for tens of thousands of facilities nationwide.

How eCR works -

- For eCR data to be able to flow from HCOs to the PHAs utilizing the eCR architecture, each EHR product must first enable functionality to support the eCR workflow. Your specific EHR product may implement eCR by integrating the eCR Now FHIR App or via in-house development in the EHR product.
- To initiate the eCR workflow, your EHR receives and loads a set of trigger codes that represent health conditions of public health interest into the background of your EHR. These trigger code value sets are retrieved from the [Electronic Reporting and Surveillance Distribution \(eRSD\) website](#), and both routine and emergent updates should be expected as new codes are added and deprecated ones removed. The eRSD also articulates the timing parameters that an EHR product should use to evaluate patient data against the value sets.
- When a clinician is going through the normal workflow and recording data in the EHR, those data are evaluated against the trigger codes in the background.
- When a match occurs, an electronic initial case report - or eICR - is transmitted to the AIMS platform.
- Once the eICR is received at AIMS, it is validated and processed using a decision support engine known as the Reportable Conditions Knowledge Management System, or RCKMS. The rules in RCKMS are authored by state, territorial, local and tribal public health epidemiologists and align with the jurisdictional laws that determine reportability.
- RCKMS confirms if the eICR is reportable and sends it to the appropriate public health agency or *agencies* – as a report may be sent to more than one jurisdiction, depending on both where care was provided, and the patient's residence, which may be different at times.

Let's transition now to talking about the **Reportability Response**, or what we refer to as the RR -

- For each case report that is sent from the EHR, a Reportability Response - or RR - is sent back from the AIMS platform. In other words, there should always be a 1-1 ratio of eICRs triggered outbound to RRs received inbound.
- The RR serves three main functions,
 - First, an RR being generated and sent back indicates that reporting was carried out successfully – that the eICR was received and processed by AIMS and RCKMS. The RR will indicate a determination of reportability status for each condition that was included in the eICR and, if found to be reportable, which jurisdiction(s) the eICR was sent to.
 - The RR can also contain additional information or follow ups from the PHAs about the condition reported - such as additional testing needs, treatment guidance, or isolation and quarantine guidelines. This information is oriented for providers and other clinical staff.

- Lastly, the RR can contain information on errors and warnings that need to be addressed and should be used by the EHR administrators for the organization.

Summary of the eCR Architecture Diagram

- To summarize the eCR workflow, when a provider is going through their normal workflow using the EHR as part of patient care and a match occurs between the data entered and one of the codes loaded in the background of the EHR, an eICR is generated and sent to AIMS.
- AIMS receives, validates, and processes the eICR against the rules authored by the PHAs using a decision support engine called RCKMS to determine whether the case is reportable.
- Finally, an RR is generated and returned to the originating system for every eICR received by AIMS. While an RR is always sent back from AIMS and should be available to a system administrator, the RR being visualized to a clinical end-user should be based on the determination of reportability status that is reflected within the RR.
- eCR operates behind the scenes in EHRs using data collected by clinicians as part of care delivery to identify potential cases, create case reports, confirm reportability through the application of rules, and securely transmit the reports to the appropriate PHA(s).

Trust Framework

- Now let's bring our attention to the trust framework that needs to be in place between the healthcare organization and the APHL AIMS platform. APHL AIMS acts on behalf of the healthcare organization, or provider, to make appropriate public health disclosures to the PHAs. A trust framework can be accomplished in several ways, and we seek to obviate the need for any point-to-point legal agreements wherever possible.
- For members of eHealth Exchange and implementers of Carequality or those associated with them, such as CommonWell, no new legal agreements are required.
- As part of your onboarding process, the eCR Onboarding team will work with your organization to ensure that a trust framework to enable eCR is in place.

Technical Connection

- The AIMS platform currently supports two technical connectivity options for eCR.
 - The first option is to utilize Direct Secure Messaging via your Health Information Service Provider, or HISP, and the second option is to use XDR via eHealth Exchange HUB.
 - Note that the connection options available to a *particular* healthcare organization may be constrained based on the combination of existing EHR functionality and business relationships, and the CDC eCR onboarding team can help you understand your specific next steps.
- If you intend to use a HISP to connect, please reach out to the HISP contacts as soon as possible to make sure any contracts can account for an increase in message volume. Many HISPs provide flat rate contracts to handle this.

Lastly, when your organization is successfully sending live eCR data to the PHAs using the AIMS platform, you will enter a period known as PHA Validation. You will work with PHAs to review your production data for final verification. During this time, your organization is asked to maintain current manual case reporting processes with every PHA until otherwise notified by the respective PHA eCR team. Please reach out to your PHA for more details.

Electronic Case Reporting (eCR) – Next Steps



PLEASE COMMUNICATE
WITH YOUR EHR VENDOR TO
CONFIRM THEY HAVE AN
ECR PRODUCT AVAILABLE



PLEASE REACH OUT TO
ECR@CDC.GOV TO INITIATE YOUR
ECR ONBOARDING PROCESS



FOR MORE INFORMATION VISIT

- <https://www.cdc.gov/ecr/>
- <https://ecr.aimsplatform.org/>

The eCR Onboarding Team will be available to help your organization throughout your eCR implementation and can help facilitate communication between you and your public health agencies.

For any questions or to get started implementing, please reach out to the CDC eCR Onboarding Team at ECR@CDC.GOV as well as your EHR product representative. If you're interested in onboarding, we also encourage you to reach out to your jurisdictional public health agency for additional pre-implementation steps that may be required, such as any jurisdictional registration. Additional information can be found on the CDC eCR webpage and the APHL eCR webpage shown on this slide. Once your organization is ready to get started, the eCR onboarding team will work closely with you, your EHR, and your public health agencies to ensure a smooth implementation process.