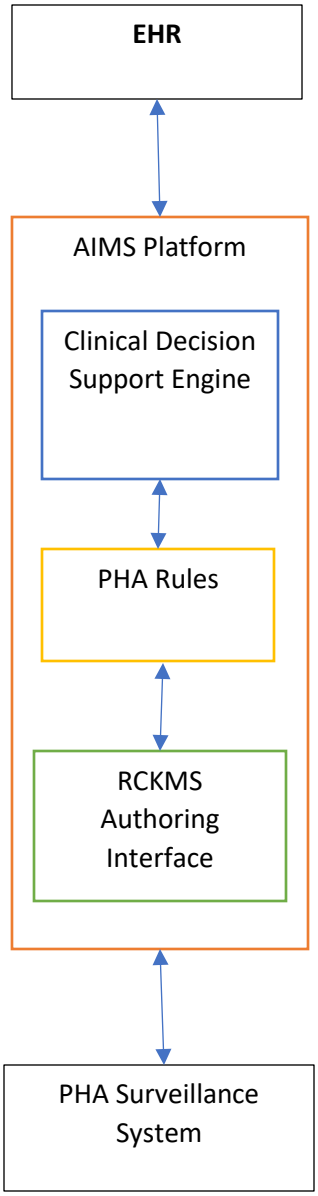


How Does an eCR Trigger?

- Each EHR contains trigger logic that tells it when to generate an eCR.
- EHRs can be configured by each Organization / Facility / etc according to their clinical preferences.
- The EHR creates the ability to send an eCR off of trigger logic, but it's up to an org/facility/provider to actually "turn eCR on" or implement it technically on their end.
- It is our current understanding that trigger logic is not updated at a regular cadence on the EHR triggering side.
- EHR logic does not often change when a position statement is updated. It remains static and is designed to "cast our net wide".
- An eCR is triggered when a certain set of pre-determined logic is matched on the EHR / provider side. The EHR sends that document to the AIMS platform at whatever cadence they are configured to send them. (This can vary by org/facility/provider based on their technical policies and capabilities.)

What happens when the eCR gets to the AIMS platform?

- The eCR patient record is run through the RCKMS Clinical Decision Support Engine to see if the eCR truly meets criteria to be reportable, and if so – to whom.
- The PHA's configure rules in the RCKMS Authoring Interface to align with their jurisdictional reporting requirements.
- The AIMS Platform maintains these files for 7 days and then they are expunged.
- If a rule match is found, an RR is sent to the jurisdiction and back to the provider stating which criteria were matched on.
- If no rule match is found, an RR is sent that indicates no match was found for the file.
- If a file has fatal errors, an RR is sent back to the provider indicating that the transaction failed.

How do I get a reportable condition from a file that didn't trigger off something else?

- EHR trigger logic is a list of codes that tell the EHR to send a file to AIMS. AIMS then runs that file against ALL conditions a jurisdiction has rules in production for. It is possible that there is match based on logic configured in RCKMS for a condition. An EHR may only trigger based on a small subset of codes for labs or diagnoses. However, RCKMS looks as much more criteria and has more granular rule logic based on CSTE position statements.

Example:

Patient Presents for a COVID-19 test at a provider's office. The LOINC code associated with this test is configured as trigger logic for the EHR.

LOINC: 94316-7

EHR finds a trigger code during this encounter and created a report for us!

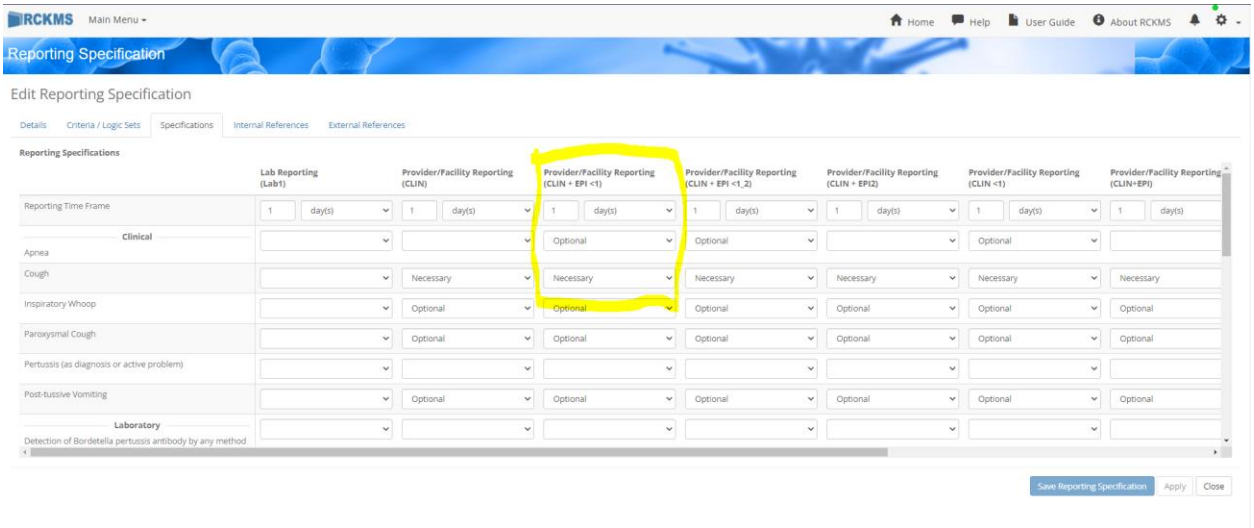
The eCR is generated and sent to the AIMs platform. The CDA files contains patient demographic information, as well as past and present problems, diagnoses and labs. The file runs through logic that your jurisdiction has configured for COVID-19 and it's determined that you don't consider this a reportable event UNLESS the lab is positive. So, there is no COVID-reportable with this file.

No Rule Met for COVID-19 due to negative lab results

However, the files runs through ALL the logic that you have configured for all reportable CONDITIONS. It's determined that this patient does have an active problem of cough, and an active diagnosis of sleep apnea.

*But, WAIT!!! I found a match! This patient has a cough and apnea! This could be **Pertussis**!!!*

This cough and apnea criteria matches what you have configured in Production for Pertussis.



So, although this file did trigger off of COVID-19 and was not reportable for that. It DOES meet criteria to report for Pertussis.

Next Step Considerations:

1.) Do we need to tweak logic for conditions that may have an overlap of symptoms so that they don't report when we don't want them to?
2.) Can we filter these out in our surveillance system somehow?

How Can I find out what triggered?

In the future, to find the code that is triggering in the eICR, do the following:
1) Check what the trigger was for the eICR
- Open the XML file for the eICR
- Search for "sdtc:valueSet="2.16.840.1.114222.4.11.7508"
- That attribute "tags" which code(s) is the trigger code

2) Check what criteria RCKMS matched on in the RR document:
- Open the XML file for the RR
- Search for "2.16.840.1.113883.10.20.15.2.3.27"
- The above OID is a templateID for the Determination of Reportability Rule section in the RR, which tells us which RCKMS criteria that RCKMS matched on
- Note, there may be multiple criteria that RCKMS matched on.

3) Manual Trigger in eICR, find the string: "PHC1464"

If you have any further questions on this topic, please let us know. For a new topic, please submit a ticket here.