

# Electronic Case Reporting Implementation in Virginia: Collaborations, Guidance, and Lessons Learned from “the Old Days” of Electronic Laboratory Reporting

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## Background

- Beginning in July 2017, VDH desires to “pilot” with a clinical provider and electronic health record (EHR) vendor for the Meaningful Use (MU) stage 3 guidelines under “specialized registries” in sending and receiving electronic case reports.
- Electronic case reporting (eCR) is defined as “the electronic generation and transmission of reports of potential cases of reportable conditions from the EHR to relevant state and local public health authorities for review and action.”<sup>(a)</sup> Electronic case reporting is part of Meaningful Use Stage 3, which will begin in 2018.
- VDH is using this period in 2017 to “pilot test” with at least 2 facilities to create a uniform technical and business structure in receiving eCRs.
- VDH is currently setting the stage to work with healthcare providers in receiving initial case reports (eCR). This is a collaborative effort with internal and external stakeholders, and national support and guidance.

a) Digital Bridge, 2017— [http://www.digitalbridge.us/db/wp-content/uploads/2017/04/eCR-Digital-Bridge-webinar-Part-2\\_0.pdf](http://www.digitalbridge.us/db/wp-content/uploads/2017/04/eCR-Digital-Bridge-webinar-Part-2_0.pdf)

## Methods

- Business analyst used the collaborative requirement definition methodology (CRDM) to elicit requirements, gain interest and gather importance of eCR for stakeholders.
- Key stakeholders developed 12-month timeline to ensure success of project.
- Business analyst facilitated “brainstorming” meetings to address development of business requirements, workflow process, and technical infrastructure standards for group consensus on project deliverables.
- HL7 provided onsite technical training for eCR standard for message validation.
- Business analyst facilitated bi-weekly internal stakeholder meetings to ensure project monitoring.

Figure 1: Stakeholder Engagement Diagram- Internal/External collaboration, and stakeholder engagement between public health and clinical providers are essential to the success of improving population health outcomes in Virginia.

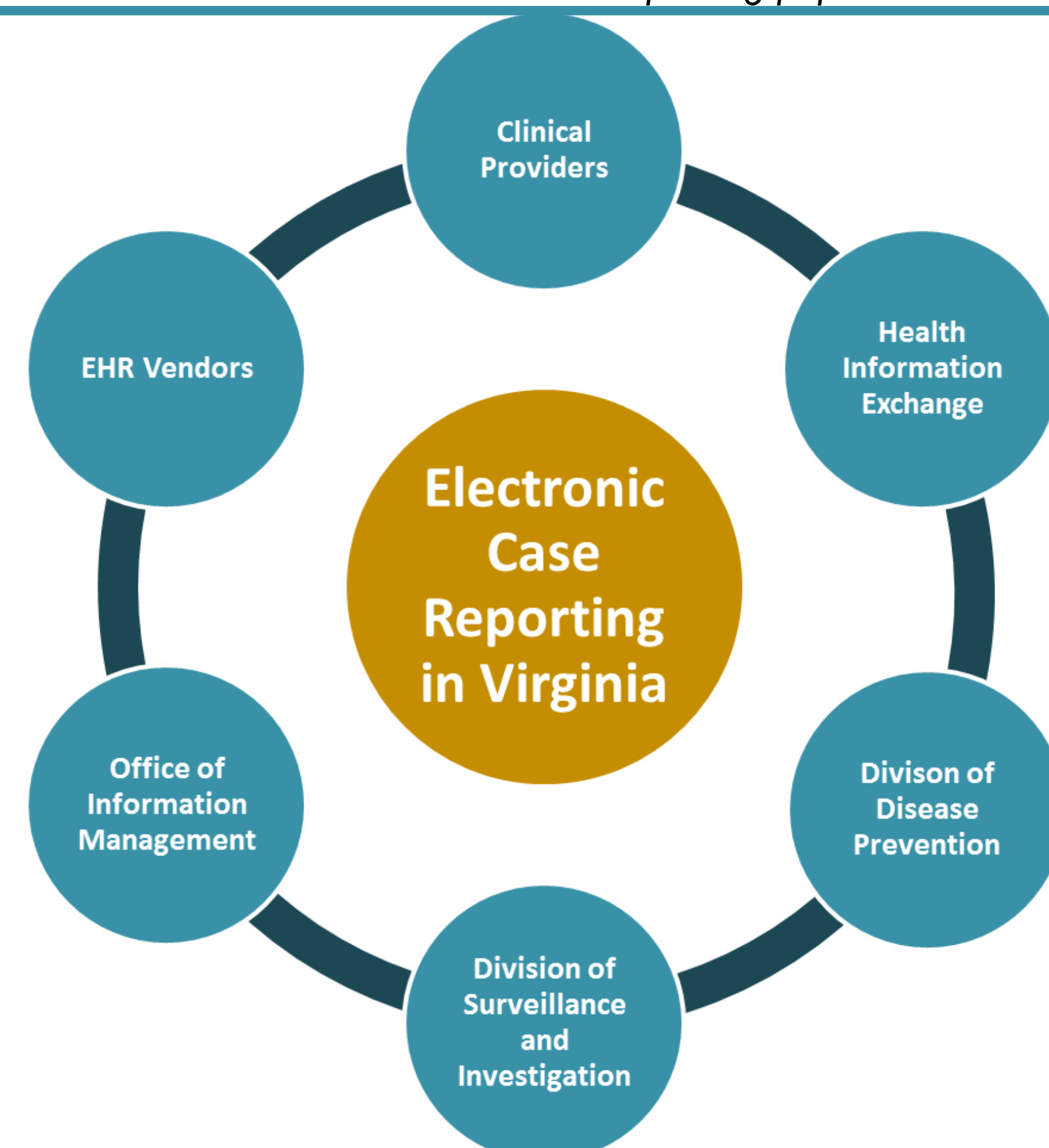
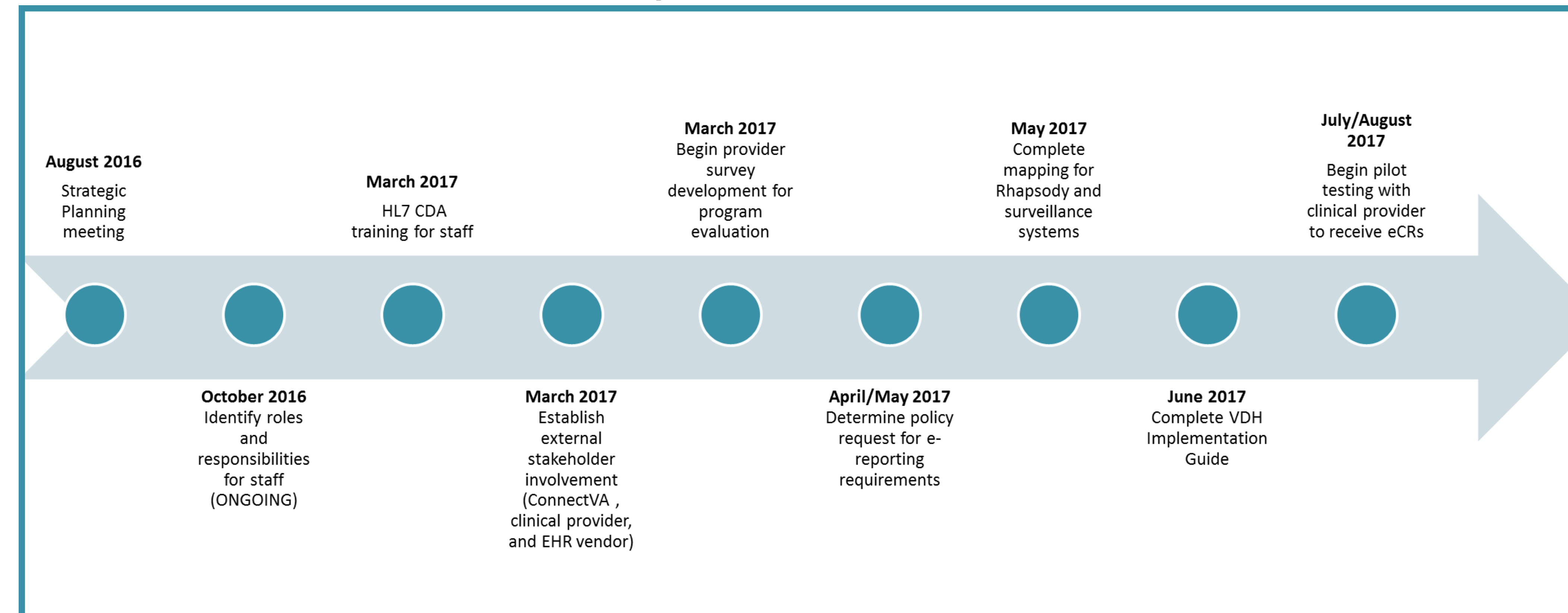


Figure 2: High-Level Time for VDH eCR Implementation Process



## Discussion

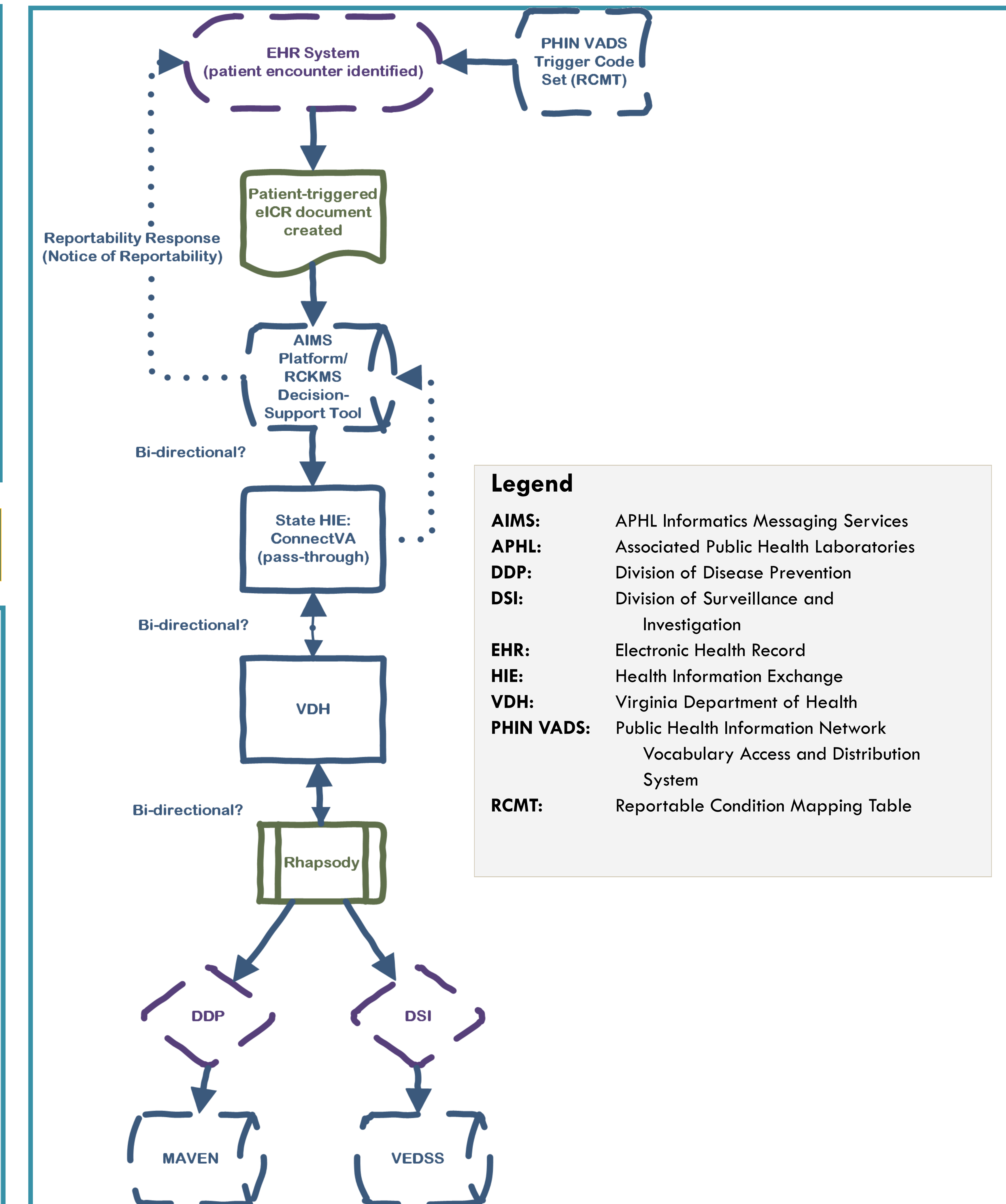
- The Informatics Fellow is the project manager and business analyst to monitor, evaluate, collaborate, and liaison, with internal/external stakeholders to facilitate progress and elicit requirements. The Fellow also facilitates bi-weekly meetings with key staff for effective progress monitoring and evaluation. National expertise and guidance was provided workshops, conference calls, and webinars.
- In June 2016, an eCR “kick-off” meeting was conducted to inform internal stakeholders of eCR requirements, which served as a catalyst for initiating interest in eCR efforts for the agency.
- In August 2016, a “strategic action-planning day” for key stakeholders was facilitated by the National Association of City and Council Health Officials (NACCHO) to create detailed project timeline, elicit requirements, and delegate responsibilities for success of eCR implementation.
- In March 2017, HL7 conducted Clinical Document Architecture (CDA) training at VDH to help technical staff understand the eCR standard for message validation.
- By July 2017, technical infrastructure will be complete. As a requirement of the Commonwealth of Virginia, all health data must be exchanged through the state Health Information Exchange (HIE). Bi-directional infrastructure must be established, whether or not the APHL Public Health Laboratories Informatics Messaging System (AIMS) Platform is employed.
- Guidance from the Centers for Disease Control and Prevention (CDC) and CSTE is being incorporated regarding the Reportable Conditions Knowledge Management System (RCKMS) EHR decision-support triggers and minimum data elements for eCR documents.
- By July 2017, VDH will begin pilot testing with at least one provider. This testing phase will set the stage for readiness in receiving production-level messages for Meaningful Use Stage 3 in 2018.

## Results

- VDH developed a 12-month strategic action plan, including goals, objectives, and deliverables for all stakeholders leading up to pilot testing in 2017. This plan defines technology and business deliverables for implementation. Internal staff was identified to work on technical aspects such as message validation.
- Workflow analysis and design was developed.
- Internal technical implementation guide is being developed to guide clinical providers, EHR vendors and VDH.
- Pilot provider is identified for initial testing in July 2017.

**Please note that limitations have been identified in this process:** The speed and success of the pilot project is dependent on successfully onboarding with a clinical provider and EHR vendor to test and validate eCRs. This will affect the timeline and consequential deliverables. It is also important to note that clinical providers are not required to register specifically for electronic case reporting for Meaningful Use Stage 3 in 2018.

Figure 3: Workflow Process for receiving eCRs to VDH



## Conclusion

- A defined, strategic plan is necessary to determine efficient step-wise processes for successful statewide eCR implementation.
- A project manager or business analyst is necessary to ensure dedication and success of project deliverables. These roles play a crucial factor in establishing communication between internal and external stakeholders, and continuous evaluation of project deliverables.
- Incorporation of ELR business practices is being employed, as appropriate.
- Internal/external stakeholder engagement is essential for requirements elicitation, assurance of VDH technical infrastructure and avoidance of redundancies. National standards, such as CDC guidance, will be employed to ensure consistency, whenever feasible.
- This process can be used as a guideline for other state and local agencies seeking to establish eCR processes and infrastructure in their localities.