



Use Case Title: Electronic Case Reporting

Overview: 11-month-old Ravi is diagnosed with Pertussis, a reportable condition. An initial Electronic Case Report (eICR) is triggered, evaluated for reportability and sent to the appropriate public health agencies. Public health returns a Reportability Response with guidance and a request for supplemental information. In combination with other information known to the public health agency, they suspecting a possible outbreak and adjust their pertussis reporting specifications to allow for earlier detection of reportable events. Timely and accurate reporting, ensures Ravi is successfully treated and discharged home.

Value: Automated reporting from EHRs reduces Healthcare Provider burden and enhanced communication of condition-specific information in the context of the patient and the community. Public Health Agencies receive more timely and complete case reports for review and action.

Scheduled times: Tuesday 12:30-1 pm
 Tuesday 4-4:30 pm
 Tuesday 5:30-6 pm
 Wednesday 12:30-1 pm
VIP Tour: Tuesday 3-3:30 pm



Scenario	Vendor/Products	Standards*
<p>1: Provider</p> <p>Ravi, an 11 month old infant, is suspected of having pertussis. The clinician orders a lab test for confirmation. Upon receipt of the lab result, the resulted test (43913-3 Bordetella pertussis DNA [Presence] in Nasopharynx by Probe and target amplification method), matches a RCTC code and triggers an eICR from the provider’s EPIC EMR system. The child is successfully treated and is discharged home following hospitalization and treatment.</p>	Epic/ Epic 2017	eICR; Reportability Response; IHE XDR
<p>2: Shared Public Health Infrastructure</p> <p>The eICR is received and validated by AIMS and then sent to the Reportable Condition Knowledge Management System (RCKMS) for a determination of reportability. The RCKMS decision support engine hosted on AIMS platform processes eICRs against jurisdiction specific</p>	APHL/ AIMS CSTE/ RCKMS	eICR; Reportability Response; IHE XDR

Scenario	Vendor/Products	Standards*
reporting requirements. Upon being determined as reportable by RCKMS, AIMS forwards the eICR to the appropriate Public Health Agencies (PHAs) – Utah Department of Health (UT DOH), where care was provided, in this scenario, and also to Houston Health Department (HHD), where the patient resides. AIMS generates a Reportability Response and sends it to the PHAs and back to the provider system.		
3: Provider An infection preventionist in the Epic Clinic is working a queue of reportable conditions. They have received a Reportability Response from AIMS and will review the information and provide supplemental data on the patient for the UT DOH.	Epic/ Epic 2017	Reportability Response; IHE RFD; IHE XDR
4: Public Health Agency (Utah DOH) The state epidemiologist and surveillance staff monitor incidence reports of reportable cases to manage outbreaks. They use the eICR, RR and supplemental data as part of an effort to identify an outbreak.	Utah DOH/ EpiTrax	eICR; Reportability Response; IHE RFD; IHE XDR;
5: Public Health Agency Infrastructure (Orion Rhapsody at Houston Health Department) Houston Health Department uses Rhapsody to enable consuming, parsing, and “forwarding” the eICR document to the Infectious Disease system, Conduent Maven.	Orion health/ Rhapsody	eICR; Reportability Response; IHE XDR
6: Public Health Agency Infrastructure (Conduent Maven at Houston Health Department) The jurisdiction epidemiologist monitors incidence reports of reportable cases to manage outbreaks. They use the new eICR, RR and supplemental data.	Conduent/ Maven	eICR; Reportability response
7: Public Health Agency and RCKMS Utah DOH has decided to broaden the criteria for pertussis due to the outbreak. They use RCKMS to broaden the criteria to include suspect cases by turning-on reportability for Lab tests ordered and/or with problem reported as Pertussis.	Utah DOH CSTE/ RCKMS	

***Data exchange standards:**

- **HL7 CDA® R2 Implementation Guide: Public Health Case Report, Release 2, STU Release 1.1 - US Realm – The Electronic Initial Case Report (eICR)** (Online at http://www.hl7.org/implement/standards/product_brief.cfm?product_id=436)
- **HL7 CDA® R2 Implementation Guide: Reportability Response, Release 1, STU Release 1.0 - US Realm** (online at http://www.hl7.org/implement/standards/product_brief.cfm?product_id=470)
- **IHE IT Infrastructure Technical Framework: Profile for Retrieve Form for Data Capture (RFD) and Profile for Cross-enterprise Document Reliable Interchange (XDR)** (Online at http://ihe.net/uploadedFiles/Documents/ITI/IHE_ITI_TF_Vol2b.pdf)