Use Case Title: Death Reporting: Opioid & Infectious Disease Monitoring

Overview: Two approaches are leveraged for electronic reporting of death information to public health for vital records. Interoperability enables near-real-time processing of death information allowing mortality information to be correlated with epidemiology and opioid program systems.

Value: For Public Health, this enables collection of higher quality standard data for demographic, epidemiologic surveillance and research in a more timely and efficient manner from the provider. Access to coded electronic death information in near-real-time improves integration with other stakeholder electronic systems (e.g. Opioid program, Epidemiology systems). This further promotes consistent statistics between jurisdictions and the national vital records offices, improving the ability to measure the health of the population, detect issues, and support early interventions. For providers/EMR Systems, this enables efficient birth reporting through re-use of clinical information already available in the EMR, minimizes the costs, and reduces custom interfaces.

Scheduled times:　　Tuesday: 12-12:30
　　　　　　　　　　　　Tuesday 6-6:30
　　　　　　　　　　　　Wednesday 10-10:30
　　　　　　　　　　　　Wednesday 2:30-3
　　VIP Tour:　　　　　Tuesday 2-2:30

Scenario	Vendor	Products	Standards
Step 1: Hospital An elderly man is brought to the hospital having waited too long to seek treatment. He has multiple complicating conditions and unfortunately passes. The medical examiner is able to leverage the patient care summary record to surface the state's electronic death reporting forms, and completes the provider aspects of the record, including documentation of the narrative cause of death information.	Epic		IHE VRDR IHE RFD

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Scenario	Vendor	Products	Standards
Step 2: Vital Records: Electronic Death Registration System The EDEN system is used to complete the death registration. The EDEN system then reports the death information to the National Center for Health Statistics (NCHS) (VRDR BFDRFeed - HL7v2.6) to support calculation of national statistics relating to US deaths. This information includes the narrative cause of death and the narrative race and ethnicity.	UTAH DEPARTMENT OF HEALTH	EDEN EDRS	IHE VRDR IHE RFD: QRPH-47 (FHIR), QRPH 38 (HL7 v2.6)
Step 3: National Vital Statistics NCHS receives the death report and compiles national statistics. The cause of death and the race and ethnicity are coded and returned to the jurisdiction.	CDC CENTERS FOR DISEASE CONTROL AND PREVENTION		IHE VRDR: QRPH-47 (FHIR), QRPH 38 JDI (HL7 v2.6)
Step 4: Vital Records: Electronic Death Registration System In Michigan, the physician certifying a recent death logs into the Electronic Death Reporting System (EDRS). Recently, the patient presented with Hepatitis A and was treated at Epic Hospital. The EDRS retrieves the information related to that stay to help give the certifier a complete picture of the conditions that may have led up to the patient's death (FHIR). The certifier documents the Hepatitis A as a condition contributing to the primary and secondary causes of death, fentanyl poisoning and hepatic failure. The record is sent to NCHS where the causes of death are coded and returned to the jurisdiction.	ALTARUM MICHIGAN		IHE VRDR: QRPH-47 (FHIR), QRPH 38 JDI (HL7 v2.6))
Step 5: Public Health Epidemiology The death records with the coded cause of death are provided to the jurisdiction epidemiology department. Since this information is readily available, the epidemiologist is able to correlate with near-real-time monitoring and of opioid deaths and hepatitis A related deaths.	MICHIGAN		IHE VRDR QRPH-38 JDI (HL7 v2.6))

Data exchange standards:

- **IHE IT Infrastructure Technical Framework: Profile for Retrieve Form for Data Capture (RFD)** (Online at Online at http://ihe.net/uploadedFiles/Documents/ITI/IHE_ITI_TF_Vol2b.pdf))
- **IHE QRPH Profile for Vital Records Death Reporting Enhanced (VRDR)** (Online at https://www.ihe.net/uploadedFiles/Documents/QRPH/IHE_QRPH_Suppl_VRDR.pdf)