

Birth and Fetal Death Reporting Enhanced (BFDR-E) and Vital Records Death Reporting (VRDR)

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The Problem

- Vital Events reporting includes demographic, medical, and geographic data derived from birth certificates, death certificates and fetal death reports



- Current process of capturing vital records information is 
 - Duplicative
 - Labor-intensive
 - Costly
 - Can be error prone
- Results in issues with timeliness of data submission and the quality and usefulness of these data may be adversely affected



National Vital Statistics System

7 million events processed per year



4.0 million birth records per year



2.7 million death records per year

50,000 fetal death records

eVital Standards

Capturing birth and death data in electronic health record systems



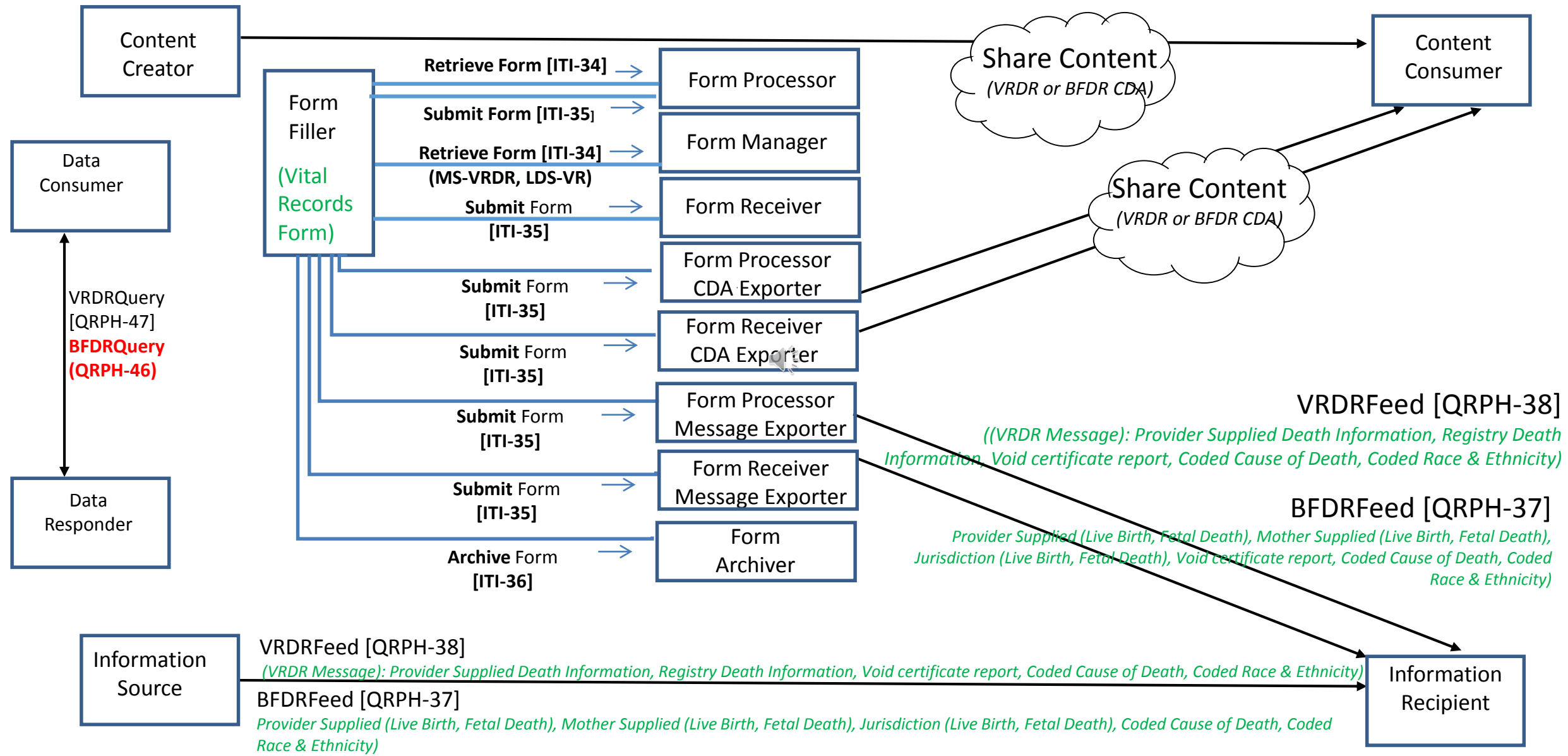
Electronic
Exchange
Using HL7
and IHE-based
standards

Improving the timeliness, accuracy, and completeness of vital records data from provider to Jurisdiction and bi-directional Jurisdiction – National information flows



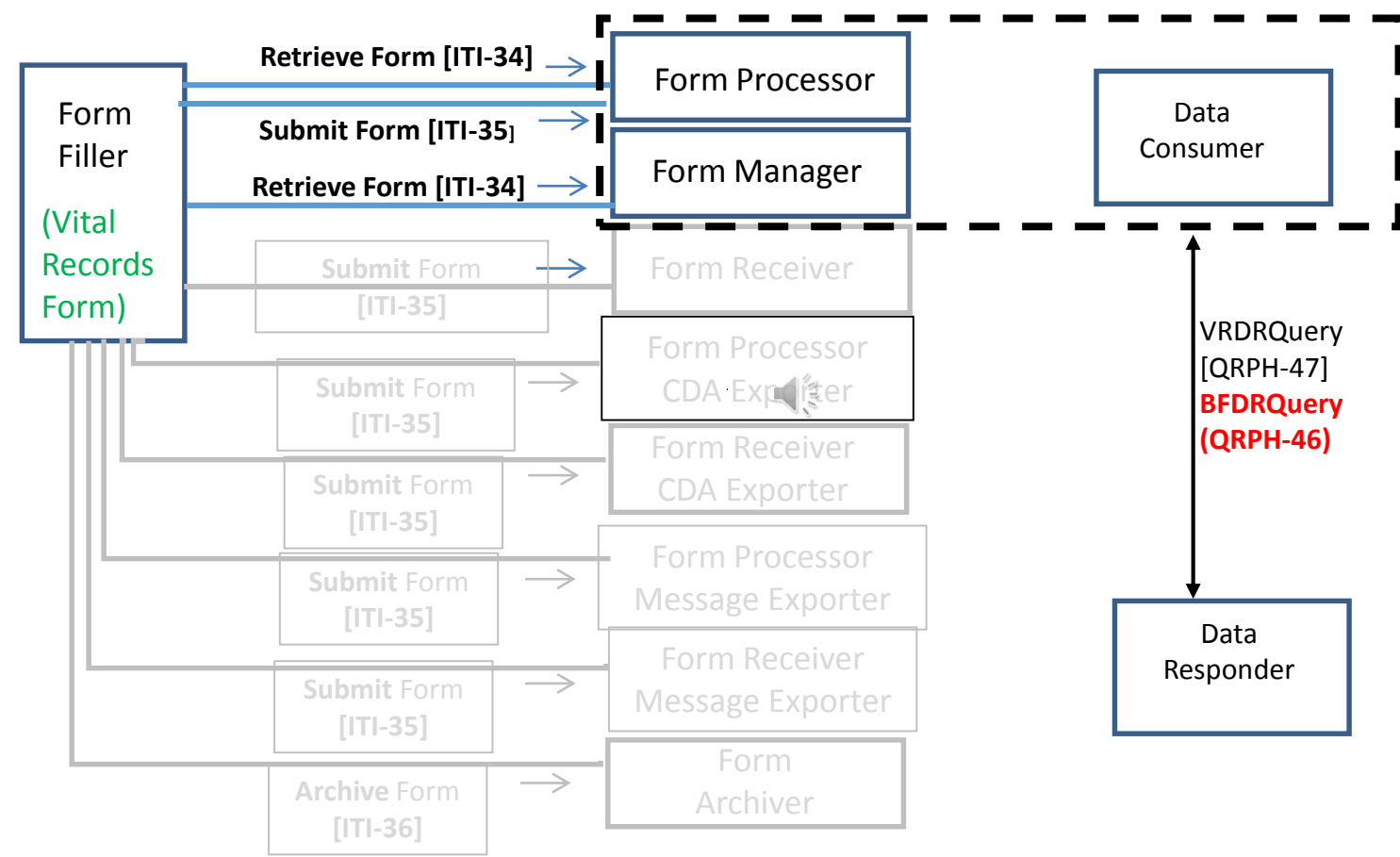
Technical Solution

QRPH: Vital Records Reporting Profiles Basic Process Flow in BFDR-E and VRDR



Technical Solution

QRPH: Vital Records Reporting Profiles mRFD using FHIR



Technical Solution

VRDR

- Conveys death reporting information using:
 - Pre-population of data (using a Medical Summary) from EMRs to Jurisdiction
 - Messages between Provider and Jurisdiction and bi-directionally between Jurisdictions and National Vital Statistics Agency
 - CDA Death Report between Provider and Jurisdiction or from Jurisdiction to National Vital Statistics Agency
 - FHIR-based query for Provider Supplied Death Reporting Information
- Supports WHO Verbal Autopsy Report

Integrating the Healthcare Enterprise



IHE Quality, Research and Public Health
Technical Framework Supplement

Vital Records Death Reporting
(VRDR)

Integrating the Healthcare Enterprise



IHE Quality, Research and Public Health
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Birth and Fetal Death -Enhanced Reporting
(BFDR-E)

BFDR-E



- Conveys Birth and Fetal Death information using:
 - Pre-population of data (using the PCC Labor and Delivery Summary) from EHRs to Jurisdiction
 - **Pre-population of data using FHIR to retrieve content from EMR (using mRFD)**
 - Messages between Provider and Jurisdiction and bi-directionally between Jurisdictions and National Vital Statistics Agency
 - CDA Report of Birth and CDA Report of Fetal Death between Provider and Jurisdiction or from Jurisdiction to National Vital Statistics Agency
- Supports WHO statistics for prenatal data, labor and delivery data, and newborn/fetus data

eVitals Standards Pilot Testing



- ❑ Minnesota Department of Health
 - Evaluating readiness for secure electronic exchange of birth registration information using the IHE and HL7 standards



- ❑ Utah Department of Health
 - Collaborating with Intermountain Healthcare to test sending death information using the HL7 V2.5.1 message and HL7 V2.6
 - Utah & DC study to assess the quality of data automatically populated from a hospital EMR for selected birth certificate medical and health items
 - Report: Developing a framework for initial and ongoing evaluation of birth data extracted from electronic health records (EHRs) for vital statistics posted on the NCHS website



- ❑ California Department of Health
 - Testing and implementation of Death Reporting to improve mortality data



- ❑ Michigan Department of Health
 - Testing and implementation of Birth Reporting
 - Testing and implementation of Death Reporting (using Utah DOH Software)



- ❑ DC Department of Health
 - Birth Quality review in collaboration with of Utah DOH to compare manual vs Electronic

Value Proposition

- **For Public Health**

- Receive coded information in near real-time
- Can be incorporated into epidemiology
- Improve ability to measure the health of the population and detect issues
- Inform and support early interventions



- **For Providers/EMR Systems**

- Improve quality of care
- Improve efficiency of reporting
- Reduce cost through
 - Re-use of the same standard
 - Minimize custom interfaces
- Leverage FHIR to facilitate retrieval of clinical information needed from EMR to complete Birth, Fetal Death, and Death reporting for vital records

Value Proposition

- **Establish interoperable electronic exchange of VR data between EMR and VR Systems**
 - More timely data release
 - Higher quality data for demographic, epidemiologic surveillance and research
 - Improved efficiency for electronic exchange of vital records information
 - Greater integration with other stakeholder electronic systems (e.g. EPI)
 - Greater standardization of electronic Vital Records data collection and exchange
 - Promote consistent statistics between the jurisdictions and national vital records offices