

Birth & Fetal Death Reporting (BFDR)

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The purpose of this project is to create an HL7 Fast Healthcare Interoperability Resources implementation Guide (FHIR BFDR IG) standard to support the needs of NCHS and its jurisdictions to successfully implement the electronic reporting of birth and fetal death information. The scope of this HL7 FHIR BFDR IG will include the content of medical/health information on live births and fetal deaths for select state and Federal birth and fetal death reporting, as indicated in the 2003 Revision of the U.S. Standard Certificate of Live Birth and the U.S. Standard Report of Fetal Death. Additionally, it will include the content that is exchanged between EHRs, jurisdictions, and NCHS. In the case of fetal death, return coded cause of death, and race and ethnicity information back to the state.

To continue support of interoperability among public health systems, there is a need to develop a FHIR IG for birth and fetal death reporting. Development of the FHIR IG for birth and fetal death will provide national data standards that will support the implementation of FHIR for NCHS, Jurisdictional partners and EHR vendors.

Whova/Zoom Links

Thursday: https://whova.com/portal/webapp/hlfhi_202009/Agenda/1212530/

Friday: https://whova.com/portal/webapp/hlfhi_202009/Agenda/1212573/

Agenda

Date	Start time	Stop time	Topic	Lead
Weds, Sept 9th, 2020	4:00 PM	5:00 PM	HL7 Kick-off meeting	HL7
Thurs, Sept 10th, 2020	9:00 AM	Noon	Zoom hang-out for BFDR	SG
Thurs, Sept 10th, 2020	1:30 PM	2:00 PM	Welcome & set-up	
Thurs, Sept 10th, 2020	2:00 PM	4:30 PM	Testing (Zoom available)	
Thurs, Sept 10th, 2020	4:30 PM	5:00 PM	Zoom check-in/discussion	
Friday, Sept 11th, 2020	9:30 AM	10:00 AM	Smart on FHIR	
Friday, Sept 11th, 2020	10:00 AM	11:30 AM	Virtual meet up - open discussion with participants - data availability (non-technical workflow)	LF
Friday, Sept 11th, 2020	11:45 AM	4:00 PM	Testing continued (Zoom available)	
Friday, Sept 11th, 2020	1:30 PM	1:45 PM	Submit report outs to Sarah - Example report out document from Connectathon 24: CAT24 Report Out Current Report Out - feel free to edit your section(s): Public Health Track - Report Out	
Friday, Sept 11th, 2020	4:30 PM	5:00 PM	Smart on FHIR Final check-in - Zoom	
Friday, Sept 11th, 2020	6:00 PM	6:30 PM	HL7 Wrap-up meeting https://whova.com/portal/webapp/hlfhi_202009/Agenda/1207305	Grahame Grieve

BFDR Zulip Chat: <https://chat.fhir.org/#narrow/stream/253316-Vital-Records.20Birth.20.26.20Fetal.20Death>

Project Roadmap page: [Vital Records Birth and Fetal Death Reporting FHIR IG](#)

Scenario Objectives

Test the draft version of the [Birth and Fetal Death FHIR Implementation Guide](#).

Specific testing:

- Profiles:
 - [Composition for Facility Worksheet for Live Birth](#)
 - [Composition for Facility Worksheet for Fetal Death](#)
 - [Composition for Jurisdiction Live Birth \(Birth Certificate\)](#)
 - [Composition for Jurisdiction Fetal Death \(Death Certificate\)](#)

Related Scenarios

We will have significant content overlap with the Birth Defects FHIR IG: [Birth Defects Reporting \(BDR\)](#)

Birth and Fetal Death Reporting FHIR IG uses profiles defined in the [Vital Records Common Profile Library](#).

Proposed Scenario Leads

Sarah Gaunt, sarah.gaunt@lantanagroup.com

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Expected participants

Georgia Department of Public Health

- Genesis Systems

Michigan Department of Health and Human Services

- Altarum

Utah Department of Health

Scenario Orientation

TBD: A webinar will be hosted on date at time to share further participation information about this scenario.

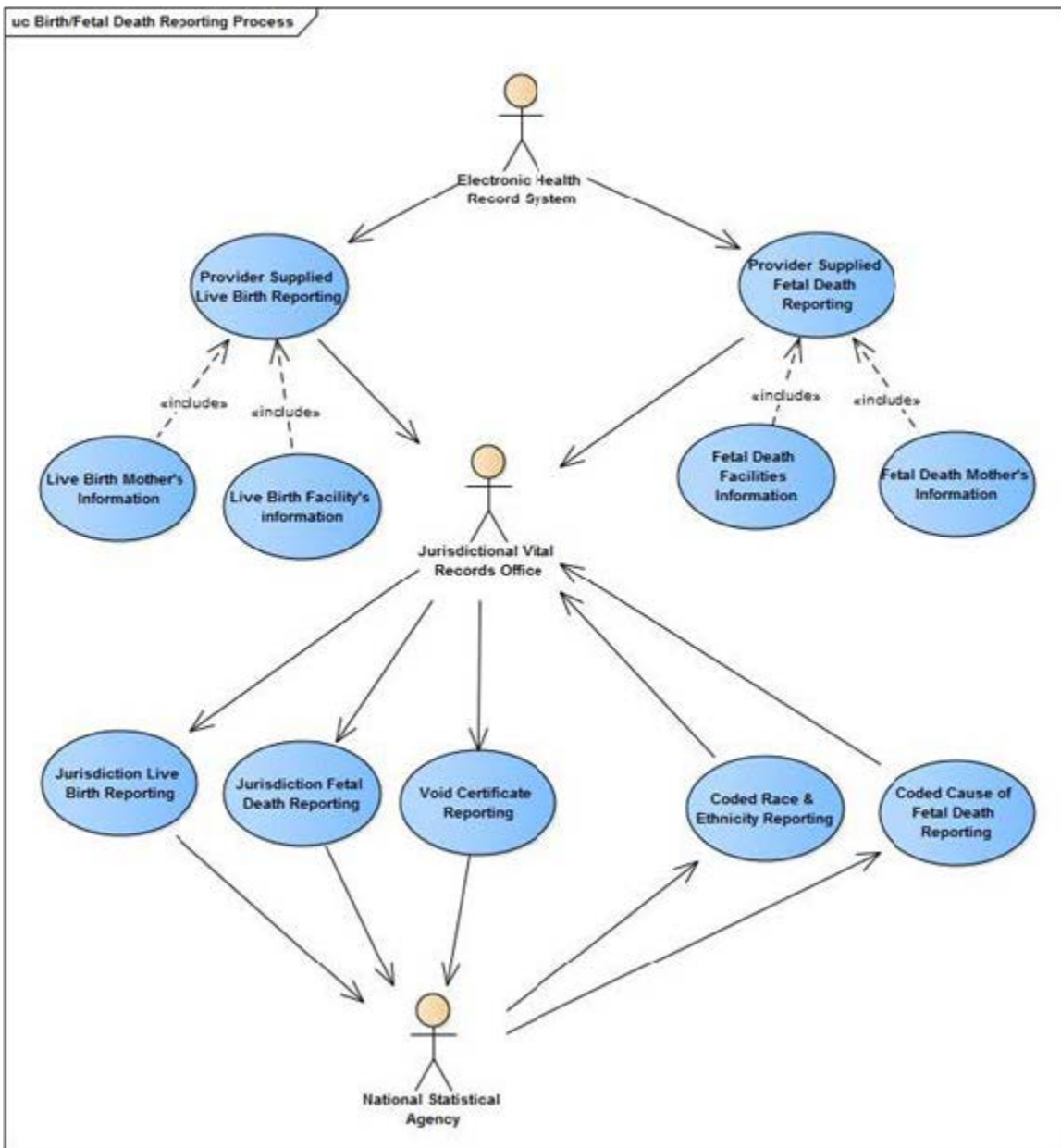
System Roles

Submitter: This actor will gather the clinical content related to the birth or fetal death report to prepare and transmit a FHIR bundle according to the IG specifications.

Receiver: This actor will receive the FHIR bundle, validate it and process it.

BFDR Tools and References

- IG: <https://build.fhir.org/ig/HL7/fhir-bfdr>
- Report issues on the Zulip chat stream - please create a new topic for each issue. eg: SNOMED Errors
- [BFDR-specific instructions on how to use the FHIR Validator](#)
- **Live Birth**
 - [Google Sheet](#) containing facility worksheet items noting priority (SHALL, SHOULD, MAY), data sources, and mappings to FHIR profiles
 - Completed live birth documents using example data:
 - [Facility Worksheet for Live Birth](#)
 - [Live Birth Certificate](#)
 - Profile instances using example data - see links in the "Example" column in the Google Sheet:
 - [Provider Facility Worksheet View](#)
 - [Jurisdiction \(Birth Certificate\) View](#)
 - List of example instances for:
 - [Examples for Provider Facility Live Birth Report](#)
 - [Examples for Jurisdiction Live Birth Report](#)
- **Fetal Death**
 - [Google Sheet](#) containing facility worksheet items noting priority (SHALL, SHOULD, MAY), data sources, and mappings to FHIR profiles
 - Completed fetal death documents using example data:
 - [Facility Worksheet for Fetal Death](#)
 - [Fetal Death Report](#)
 - Profile instances using example data - see links in the "Example" column in the Google Sheet:
 - [Provider Facility Worksheet View](#)
 - [Jurisdiction \(Death Certificate\) View](#)
 - List of example instances for:
 - [Examples for Provider Facility Fetal Death Report](#)
 - [Examples for Jurisdiction Fetal Death Report](#)



Scenarios for workflow EHR to Jurisdictional Vital Records Office Electronic Birth Registration System (EBRS)

- Provider EHR to Vital Records: EBRS (worksheet)
 - EBRS will query EHR

Scenario 1: EBRS will query EHR for source data elements needed to create the **Composition - Provider Supplied Facility Live Birth Report**

Action:

- EBRS or interface engine will query the EHR for the source mother and baby's birth information (see IHE [BFDR-E](#)). Using source information to create the **Composition - Provider Facility Live Birth Report** consisting of required data ([SHALL data elements](#)) on the newborn patient, related participants and birth certificate data
- The EBRS will validate the Document Bundle against the BFDR IG using the FHIR Validator ([BFDR-specific instructions on how to use the FHIR Validator](#))

Success Criteria:

- Successful query of required data elements

Bonus:

- Include SHOULD and MAY data elements in the [Composition - Provider Facility Live Birth Report](#)

Scenario 1 - alternate: EHR may push elements contained within [Composition - Provider Supplied Facility Live Birth Report](#) to EBRS.**Action:**

- EHR will create FHIR document containing the [Composition - Provider Facility Live Birth Report](#) consisting of required data (SHALL data elements) on the newborn patient, related participants and birth certificate data
- EBRS will validate the Document Bundle against the BFDR IG using the FHIR Validator ([BFDR-specific instructions on how to use the FHIR Validator](#))

Success Criteria:

- Successful push of required data elements

Scenario 2: EBRS will query EHR for source data elements needed to create the [Composition - Provider Supplied Facility Fetal Death Report](#)**Action:**

- EBRS or interface engine will query the EHR for the source mother and fetus information (see IHE [BFDR-E](#)). Using source information create the [Composition - Provider Supplied Fetal Death Report](#) consisting of required data on the deceased fetus, related participants and fetal death report data
- The EBRS will validate the Document Bundle against the BFDR IG using the FHIR Validator ([BFDR-specific instructions on how to use the FHIR Validator](#))

Success Criteria:

- Successful query of required data elements

Bonus:

- Include SHOULD and MAY data elements in the [Composition - Provider Facility Live Birth Report](#)

Scenario 2 - alternate: EHR may push elements contained within [Composition - Provider Supplied Facility Fetal Death Report](#)**Action:**

- EHR will create FHIR document containing the [Composition - Provider Supplied Fetal Death Report](#) consisting of required data on the deceased fetus, related participants and death report data
- EBRS will validate the Document Bundle against the BFDR IG using the FHIR Validator ([BFDR-specific instructions on how to use the FHIR Validator](#))

Success Criteria:

- Successful push of required data elements

Bonus:

- Include SHOULD and MAY data elements in the [Composition - Provider Facility Live Birth Report](#)

Scenarios for Jurisdictional Vital Records Office: EBRS to EBRS

- Jurisdiction to jurisdiction (full set of data -mother's + facility + local)
 - EBRS could create and validate
 - EBRS create and send also to another EBRS
 - EBRS receive and consume (and validate)
 - (EMR won't collect mother's worksheet)

Scenario 1: An EBRS will Create and validate a Document Bundle containing [Composition - Jurisdiction live birth report](#)**Action:**

- Create a Document Bundle containing the [Composition - Jurisdiction live birth report](#) consisting of required data on the newborn patient, related participants and birth certificate data
- Validate the Document Bundle against the BFDR IG using the FHIR Validator ([BFDR-specific instructions on how to use the FHIR Validator](#))

Success Criteria:

- FHIR Bundle is produced
- FHIR Bundle is valid against the BFDR IG

Scenario 2: An EBRS will send Document Bundle containing [Composition - Jurisdiction live birth report](#)

Action:

- Create a Document Bundle containing the [Composition - Jurisdiction live birth report](#) consisting of required data on the newborn patient, related participants and birth certificate data
- Send the Document Bundle to another participating EBRS recipient
- EBRS Receiver validates the Document Bundle against the BFDR IG using the FHIR Validator ([BFDR-specific instructions on how to use the FHIR Validator](#))

Success Criteria:

- FHIR Bundle is produced
- FHIR Bundle is consumed by the recipient
- FHIR Bundle is validated against the BFDR IG

Scenario 3: An EBRS will Create and validate a Document Bundle containing [Composition - Jurisdiction Fetal Death Report](#)

Action:

- Create a Document Bundle containing the [Composition - Jurisdiction Fetal Death Report](#) consisting of required data on the newborn patient, related participants and birth certificate data
- Validate the Document Bundle against the BFDR IG using the FHIR Validator ([BFDR-specific instructions on how to use the FHIR Validator](#))

Success Criteria:

- FHIR Bundle is produced
- FHIR Bundle is valid against the BFDR IG

Scenario 4: An EBRS will send Document Bundle containing [Composition - Jurisdiction Fetal Death Report](#)

Action:

- Create a Document Bundle containing the [Composition - Jurisdiction Fetal Death Report](#) consisting of required data on the newborn patient, related participants and birth certificate data
- Send the Document Bundle to another participating EBRS recipient
- EBRS Receiver validates the Document Bundle against the BFDR IG using the FHIR Validator ([BFDR-specific instructions on how to use the FHIR Validator](#))

Success Criteria:

- FHIR Bundle is produced
- FHIR Bundle is consumed by the recipient
- FHIR Bundle is validated against the BFDR IG