

International Birth And Child Model Implementation Guide

En kort oppsummering om arbeidet med veilederen

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This page is part of the International Birth And Child Model Implementation Guide (v1.0.0-ballot2: STU 1 Ballot 1) based on FHIR (HL7® FHIR® Standard) v5.0.0. . For a full list of available versions, see the [Directory of published versions](#)

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1.1 Introduction

This implementation guide aims to provide guidelines and support on the handling of fetus data in FHIR. The Project ID: 932

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1.1.1 Contributors

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1.1.2 Goal

The goals of this project include:

- Define typical use cases where handling of data of the unborn child frequently occurs. The use cases we are specifically interested in, are the use cases where communication between IT systems are necessary and data has to be transformed from one system to the other.

Bakgrunn

- HL7 **CHOICE** arbeidsgruppe (Child Health Obstetrics International Collaboration & Exploration)
 - Netherlands, USA, Australia, Sri Lanka, Germany, Norway, UK
- Active since January 2020

Mål med arbeidet med IGn

- Lage en enhetlig metode for håndtering av data om det ufødte barnet, slik at man kan lettere kommunisere data om et foster mellom ulike løsninger.
- Gi veiledning om implementering , bruk og håndtering av relevante FHIR ressurser og terminologi

Scope

- Refererer til data som er relevant for fosteret som subjekt:
 - Et « foster»= *Det ufødte avkommet som utvikler seg fra et pattedyr in utero. Hos mennesker begynner fosterets utviklingsstadium ved omtrent 9 ukers svangerskap, og slutter ved fødsel eller fødsel. Utfall for et foster kan ink. Et levendefødt spedbarn, eller fosterdød (dvs. ikke lenger i stand til å overleve) mens fosteret fortsatt er i livmoren eller på tidspunkt før fødsel.*
- *Kommunikasjon av data i **prenatal periode**, fordi når fødselen har funnet sted, vil data relatert til det nyfødte barnet være representert med en FHIR- ressurs av pasient.*

Innhold

- Hvordan kommuniserer man data om et foster?
- Hvilke FHIR resursser bruker man?
 - Pasient (mor) med utvidelse
- Status- foster:
 - “ Forventet” levende født
 - Fosterdød
 - Ukjent

name	Flags	Card.	Type
 Patient	C	0..*	Patient
 Slices for extension		0..*	Extension
 fetalStatus	S	0..1	code
 identifier	S	0..*	Identifier
 system	S	0..1	uri
 value	S	0..1	string
 gender	S	0..1	code

Scenario's

We have simplified the different types of use cases and scenarios in characteristics of the workflow. We call them the basic use cases. The simplification means that they contain a high level of abstraction, where the focus is on the intent of the work process:

Eksempler

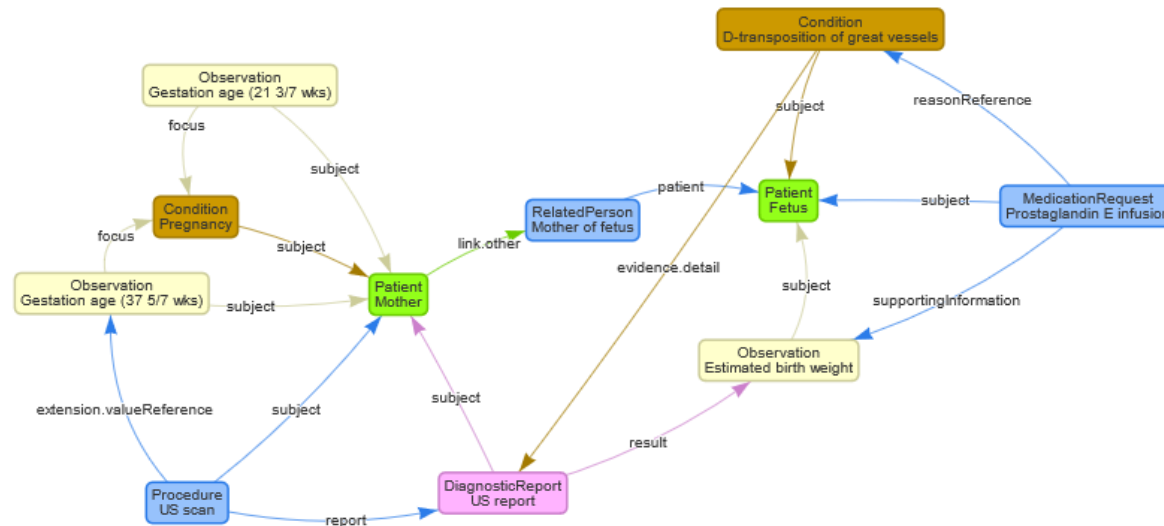


Medication request:

The care provider places a request to perform a certain medication to either the mother or one of the fetusses.

6.0.0.3 FHIR

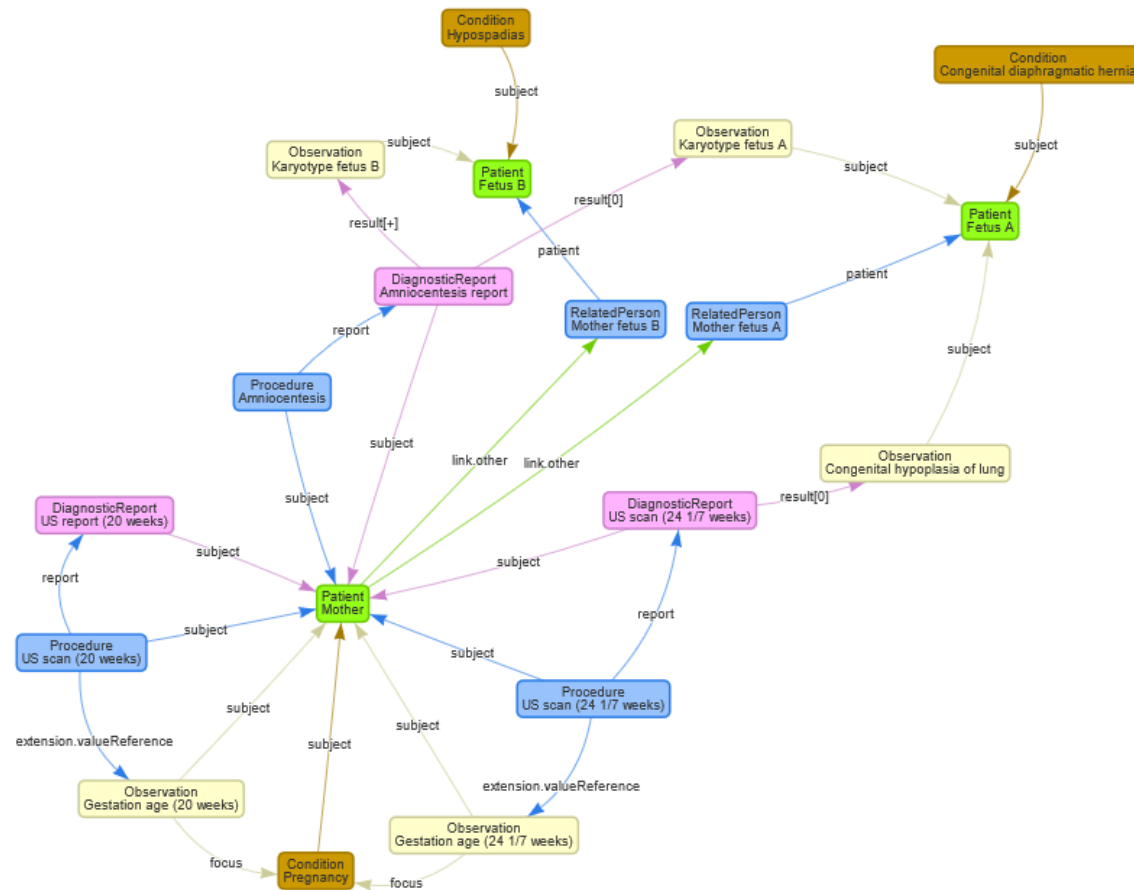
The graph below shows the mapping of this use case to FHIR. The FHIR example resources can be found in the [FHIR artifacts](#) section of this IG.



Note: the following resources are not included in the list of examples

- Condition 1 - Hypertension on labetolo
- Observation 1 - Gravida
- Observation 2 - Para
- Procedure 1 - Fetal echocardiography
- Procedure 3 - Umbilical line placement

Result reporting: As a result of the service request the results of either the mother, the fetusses or the pregnancy are reported to the service requestor.



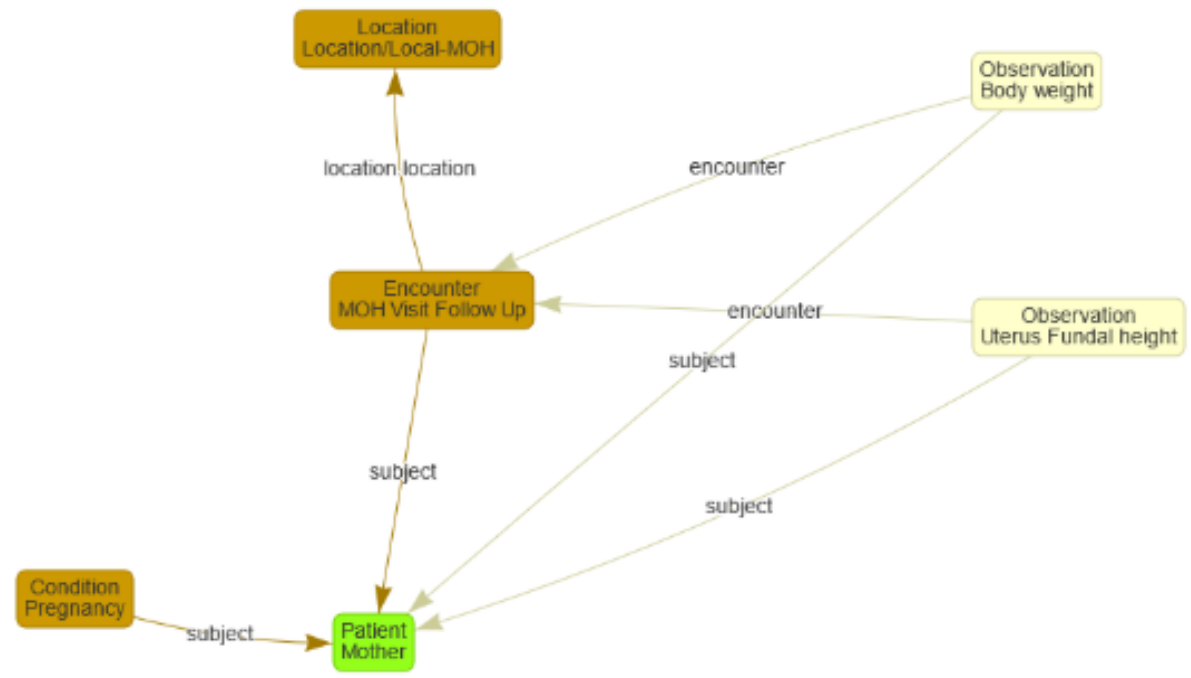
Data transfer:

Medical records are transferred from one system to the other. This could be data from the mother, fetus, child or the pregnancy itself

The first graph represents the first visit to the MOH. Baseline examinations and testing are performed such as weight (47kg), height (147cm), Hb (12g/dl), Urine for sugar (negative)



The second graph represents an example of a follow-up visit to the MHO. Other than general wellbeing, fetal growth by examination and maternal body weight is measured.



The third graph represents the third visit to the Obstetrician at Teaching Hospital Kandy, during which an ultrasound scan was performed. The scan revealed that the femur length (40mm) was lower than the expected range for the period of gestation, but the head circumference (318mm) was larger than expected. Besides, her general well-being and a few other parameters, including weight, were recorded and found to be within the normal range. Considering the patient's medical history and ultrasound findings, the Obstetrician planned an Elective Lower Segment Cesarean (EL/LCSC) delivery at 38 weeks of gestation.

