Mapping logical model to FHIR

This exercise aims to allow you to familiarize yourself with how you can map a logical model to a FHIR profile.

Solution

Exercise 1. Finding best FHIR match

In this case, the Patient resource type would be the best match for the first model. Looking at the model in exercise 3, this could map to a FHIR Observation or a DiagnosticReport resource.

Exercise 2. Mapping the model elements to the FHIR resource elements

Patient data

Model	FHIR resource element	Cardinality
Gender	Patient.gender	0..1
Name	Patient.name	1..*
First name	.given	1..3
Last name	.family	1..1
Birth date	Patient.birthDate	1..1
Place of birth	-	0..1
Official identifier	Patient.identifier	1..1
Hospital identifier	Patient.identifier	0..1
Occupation	-	0..*

Hearing test result

The FHIR Observation resource type is a good fit to capture the hearing test itself. If this is part of a bigger report, that for example also holds the interpretation of the physician, a combination of Observation plus DiagnosticReport would be a good approach.

Model	FHIR resource element	Cardinality
Patient	Observation.subject -> Reference(Patient)	1..1
TestDate	Observation.effectiveDateTime	1..1
Laterality	-	1..1
Stimulus	Observation.method	1..1
Device	Observation.device -> Reference(Device)	0..1
Comment	Observation.note	0..*
Audiogram	Observation.derivedFrom -> Reference(Media)	0..1
Result	Observation.valueCodeableConcept	1..1
TestEnvironment	-	0..1