**Axiom template for missing tooth findings**

instances in *italics*, relations in **bold**, class names are capitalized

\*\* means to adjust for appropriate subtype (e.g., tooth, surface, restoration material)

**- Declare entities:**

*:tooth* **rdf:type** :Tooth \*\* 🡨 Chen added, please confirm

*:patient* **rdf:type** :Human Dental Patient

*:provider* **rdf:type** :Dental Health Care Provider

*:dentition* **rdf:type** :Secondary Dentition

*:finding* **rdf:type** :Missing Tooth Finding \*\* # need to define uri schema for missing

# tooth findings; post on the GitHub

**- Relate entities**

*:finding* **is about** *:dentition*

*:dentition* **part of** *:patient*

*:dentition* **missing tooth number** <xsd:string> ## takes values 1 – 32

***-* Declare evaluation, when it occurred, and the visit it is part of**

## In Eaglesoft, all we know is the date the condition is entered (i.e. date\_entered).

## We do **not** have a specific oral evaluation record to match up with the condition.

## So, use the general class :Oral Evaluation for the *:evaluation*.

*:visit* **rdf:type** :Dental Visit

*:evaluation* **rdf:type** :Oral Evaluation

*:evaluation* **part of** *:visit*

*:evaluation* **occurrence date** <xsd:dateTime>

*:finding* **occurrence date** <xsd:dateTime>

**- Specify the tooth is not part of the dentition and relate to patient**

## These examples of Turtle use an anonymous individual to make a negative

## property assertion specifying that the instance of :*dentition* does not have some

## instance of type Tooth as one its parts. This is different than the tooth extraction

## procedure in that we do have a record of a particular tooth being removed from

## the patient’s mouth.

|  |  |
| --- | --- |
| [a owl:NegativePropertyAssertion ;  owl:sourceIndividual *:dentition* ;  owl:assertionProperty **has part**;  owl:targetIndividual [a Tooth\*\*]] . | [] a owl:NegativePropertyAssertion ;  owl:sourceIndividual *:dentition* ;  owl:assertionProperty **has part**;  owl:targetIndividual [a Tooth\*\*] . |

**- Specify the inputs and outputs of procedure**

*: evaluation* **has\_specified\_input** *:provider*

*: evaluation* **has\_specified\_input** *:patient*

*:evaluation* **has\_specified\_output** *:finding*

**- Add organization identifier annotation**

*:patient* **organization identifier** “*NDPBRN practice #*”

*:provider* **organization identifier** “*NDPBRN practice #*”

*:visit* **organization identifier** “*NDPBRN practice #*”

*:dentition* **organization identifier** “*NDPBRN practice #*”

*:finding* **organization identifier** “*NDPBRN practice #*”

*:evaluation* **organization identifier** “*NDPBRN practice #*”