**Axiom template for fillings**

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

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

**- Declare material entities:**

*tooth* **rdf:type** Tooth \*\*

*restored tooth* **rdf:type** Restored Tooth

*restored surface* **rdf:type** Restored Tooth Surface \*\*

*material* **rdf:type** Dental Restoration Material

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

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

**- Relate material entities**

*tooth* **part of** *patient*

*tooth* **part of** *restored tooth*

*restored surface* **part of** *restored tooth*

*material* **part of** *restored surface*

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

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

*procedure* **rdf:type** Tooth Restoration Procedure \*\*

*procedure* **part of** *visit*

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

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

*procedure* **has\_specified\_input** *provider*

*procedure* **has\_specified\_input** *patient*

*procedure* **has\_specified\_input** *tooth*

*procedure* **has\_specified\_input** *material*

*procedure* **has\_specified\_output** *restored tooth*

*procedure* **has\_specified\_output** *restored surface*

**- Declare CDT code and what it is about**

*cdt code* **rdf:type** Billing Code \*\*

*cdt code* **is about** *procedure*

**- CDT codes for filling procedures**

'2140' /\* Restorative: Amalgam \*/

'2150'

'2160'

'2161'

'2330' /\* Restorative: Resin \*/

'2331'

'2332'

'2335'

/\* '2390' -- 2390 is **not** a restoration, it's a crown \*/

'2391'

'2392'

'2393'

'2394'

'2410' /\* Restorative: Gold Foil \*/

'2420'

'2430'