**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 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*

*:restored surface* **part of** *: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> ## this is optional

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

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

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

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

*:procedure* **has\_specified\_output** *: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*

**- Add organization identifier annotation**

*:tooth* **organization identifier** “*NDBPRN practice #*”

*:material* **organization identifier** “*NDBPRN practice #*”

*:restored surface* **organization identifier** “*NDBPRN practice #*”

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

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

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

*:procedure* **organization identifier** “*NDBPRN practice #*”

*:cdt* **organization identifier** “*NDBPRN practice #*”

**- CDT codes for filling procedures**

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

'2150'

'2160'

'2161'

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

'2331'

'2332'

'2335'

‘2385’

‘2386’

‘2387’

‘2388’

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

'2391'

'2392'

'2393'

'2394'

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

'2420'

'2430'