**Axiom template for onlays**

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** :Onlay 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** “*NDPBRN practice #*”

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

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

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

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

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

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

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

**- CDT codes for onlay procedures**

'2542', /\* Restorative codes \*/

'2543',

'2544',

'2642',

'2643',

'2644',

'2662',

'2663',

'2664',

'6608', /\* Fixed Partial Denture Retainers - Onlays \*/

'6609',

'6610',

'6611',

'6612',

'6613',

'6614',

'6615',

'6634'