

2.2. Defining Post-coordinated Clinical Meanings

Expression templates can be used to enable the easy and consistent authoring of postcoordinated expressions. They are particularly useful in situations where a specific pattern is needed to support the entry, storage or retrieval of SNOMED CT expressions. Therefore, expression templates are useful for:

- Creating batches of postcoordinated expressions with a consistent structure; and
- Composing postcoordinated expressions from data entered into a user interface.

These uses are explained in more detail in the following sections.

Batch Authoring of Expressions

Expression templates may be applied to ensure a consistent structure is used by a set of authored expressions. For example, there may be a preference to always represent allergies using an expression in which the allergen is explicitly defined as the value of the `|Causative agent|` attribute. Given an appropriate expression template and a predefined list of allergen substances, a set of postcoordinated expressions can automatically be batch authored (as shown below).

Expression Template

```
419199007 |allergy to substance| : 246075003 |Causative agent| = [[+id @Substance]]
```

List of Substances

```
256259004 |Pollen|
89811004 |Gluten|
47703008 |Lactose|
13577000 |Nut|
33396006 |Nickel|
```

Resulting Expressions

```
419199007 |Allergy to substance| : 246075003 |Causative agent| = 256259004 |Pollen|
419199007 |Allergy to substance| : 246075003 |Causative agent| = 89811004 |Gluten|
419199007 |Allergy to substance| : 246075003 |Causative agent| = 47703008 |Lactose|
419199007 |Allergy to substance| : 246075003 |Causative agent| = 13577000 |Nut|
419199007 |Allergy to substance| : 246075003 |Causative agent| = 33396006 |Nickel|
```

Composing Expressions from a User Interface

Expression Templates are also useful for creating postcoordinated expressions from data entered in a user interface. For example, a radiology user interface may use two separate fields to capture the imaging procedure and the body site to which the procedure was applied. An expression template can then be applied to combine the data entered into these two fields into a single postcoordinated expression (see diagram below).

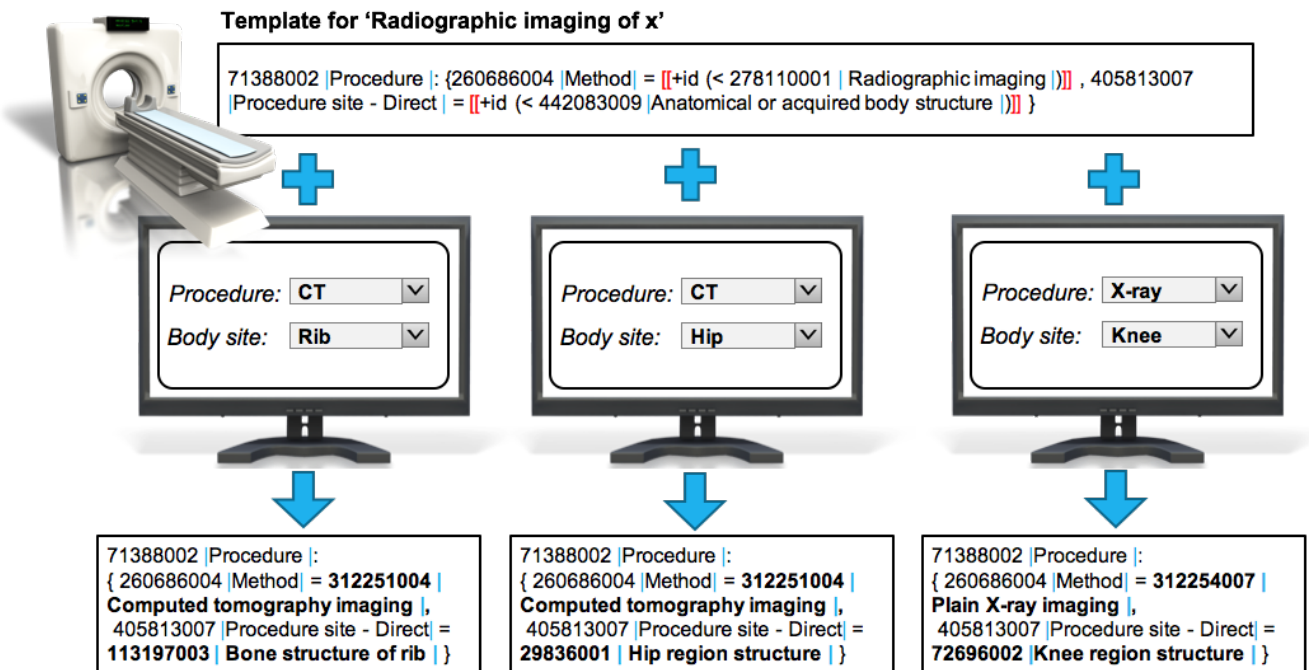


Figure 2.2-1: Using an expression template with data entered into a user interface