6.3.3. Constrain Data Entry According to Supertype Relevance

Constraining data entry according to supertype relevance is a technique that can support data entry, in which only particular sub-hierarchies that include Concepts relevant for the specific data entry point can be browsed or displayed.

**Example:**

If a pick list in a data entry template should allow the selection, a specific "cardiopulmonary bypass operation", the SNOMED CT subtype hierarchy to specify what Concepts are to be included in the list, namely the descendants of the Concept "63697000 cardiopulmonary bypass operation". Constraining data entry according to supertype relevance can be done using the transitive closure table, as shown in the figure below. The transitive closure table contains relationships to all supertypes ancestors of each defined Concept. A query for the set of Concepts, where the Concept "63697000 cardiopulmonary bypass operation" (shown as Concept B in Figure 40) is a supertype, will produce the constrained set of Concepts relevant for creating specific pick lists.

![Diagram showing the transitive closure table for constraining data entry according to supertype relevance.](image)

**Figure 6.3.3-1: Using transitive closure to constrain data entry according to supertype relevance**

Identifying selected portions of the SNOMED CT hierarchy may not be a sufficient constraint for entering data into a record. Constraining data entry through the use of Reference Sets may be more sufficient for producing the required set of Concepts relevant for data entry. [see 6.4.4 Constrain data entry using Reference Sets]