**G06:** Find concepts and their descendants that are covered by a given source code

This query returns all concepts that are direct maps and the descendants of these directly mapped concepts. This is useful if the target standard vocabulary is organized in a tall hierarchy, while the source vocabulary organization is flat.  
  
Additional constraints can be added at the end of the query if only a specific target domain or target vocabulary is desired. For example, if only SNOMED-CT as the standard vocabulary for conditions needs be returned, the target vocabulary can be set to 1.  
  
In the query only FDB indications and contraindications are returned, but not NDF-RT indications or contraindications. That is because no direct mapping between ICD-9-CM and NDF-RT exists. In order to query for drug indications please see queries D12 through D18.

**Sample query:**

WITH dm AS ( -- collect direct maps

SELECT c1.concept\_code as source\_code,

c1.vocabulary\_id,

c1.domain\_id,

c2.concept\_id as target\_concept\_id,

c2.concept\_name as target\_concept\_name,

c2.concept\_code as target\_concept\_code,

c2.concept\_class\_id as target\_concept\_class,

c2.vocabulary\_id as target\_concept\_vocab\_id,

'Direct map' as target\_Type

FROM concept\_relationship cr

JOIN concept c1 ON cr.concept\_id\_1 = c1.concept\_id

JOIN concept c2 ON cr.concept\_id\_2 = c2.concept\_id

WHERE cr.relationship\_id = 'Maps to'

AND c1.concept\_code IN ('410.0')

AND c1.vocabulary\_id = 'ICD9CM'

AND sysdate BETWEEN cr.valid\_start\_date AND cr.valid\_end\_date )

SELECT dm.source\_code,

dm.vocabulary\_id,

dm.domain\_id,

dc.concept\_id AS target\_concept\_id,

dc.concept\_name AS target\_concept\_name,

dc.concept\_code AS target\_concept\_code,

dc.concept\_class\_id AS target\_concept\_class,

dc.vocabulary\_id AS target\_concept\_vocab\_id,

'Descendant of direct map' as target\_Type

FROM concept\_ancestor ca -- collect descendants which includes ancestor itself

JOIN dm ON ca.ancestor\_concept\_id = dm.target\_concept\_id

JOIN concept dc ON ca.descendant\_concept\_id = dc.concept\_id

WHERE dc.standard\_concept = 'S';

**Input:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter** | **Example** | **Mandatory** | **Notes** |
| Source Code List | '410.0' | Yes | Source codes are alphanumeric. |
| Source Vocabulary ID | 2 | Yes | 2 represents ICD9-CM.  The list of vocabulary codes can be found in the VOCABULARY table. |
| As of date | Sysdate | No | Valid record as of specific date. Current date – sysdate is a default |

**Output:**

|  |  |
| --- | --- |
| **Field** | **Description** |
| Mapping\_Type | Type of mapping from source code to target concept |
| Target\_Concept\_ID | Concept ID of mapped concept |
| Target\_Concept\_Name | Concept name of mapped concept |
| Target\_Concept\_Code | Concept Code of mapped concept |
| Target\_Concept\_Class | Concept class of mapped concept |
| Target\_Concept\_Vocab\_ID | ID of the target vocabulary |
| Target\_Concept\_Vocab\_Name | Name of the vocabulary the target concept is part of |
| Target\_Type | Type of result, indicates how the target concepts was extracted. Includes:   * Concepts that are direct maps * Concepts that are descendants of direct maps |

**Sample output record:**

|  |  |
| --- | --- |
| **Field** | **Value** |
| Mapping\_Type | CONDITION |
| Target\_Concept\_ID | 312327 |
| Target\_Concept\_Name | Acute myocardial infarction |
| Target\_Concept\_Code | 57054005 |
| Target\_Concept\_Class | Clinical finding |
| Target\_Concept\_Vocab\_ID | 1 |
| Target\_Concept\_Vocab\_Name | SNOMED-CT |
| Target\_Type | Direct map |