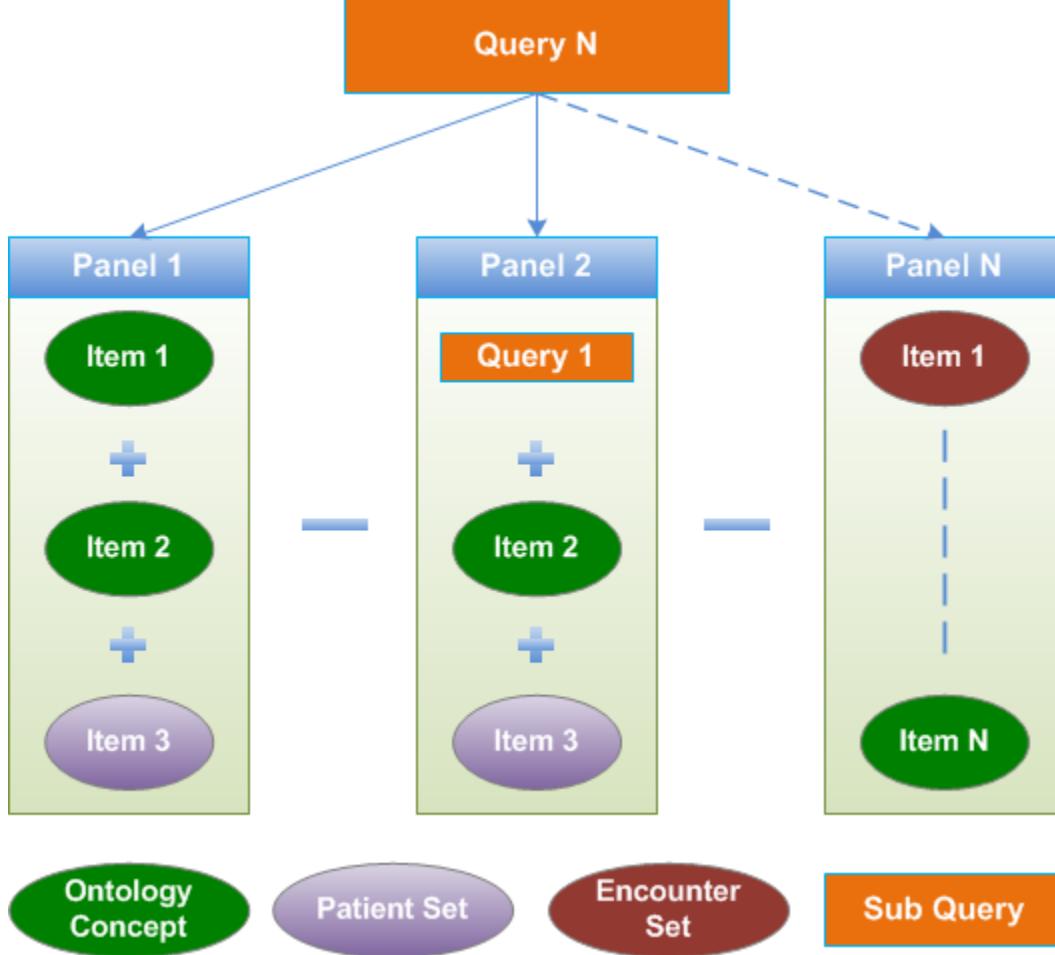


# Panel Definition Details

The **panel** is the common definition used to query the data mart. The panel holds one or more *</items>*. These items can be one of the following:

1. concept
2. patient set id
3. patients encounter set id
4. another query

The `<item>` constraints are OR-ed and the `<pane>` constraints are AND-ed in the query. Both the setfinder and PDO request share this panel definition.



**Example:**

*Italicized* and *Gray* are optional for both setfinder and PDO schema.  
 Gray items (no italics) are required only if the parent container is being used.

*Italicized* items are optional but **only** for setfinder schema.

All others are required.

```

<panel name="name0">
<panel_number># of panel</panel_number>
<panel_timing>ANY/SAMEVISIT/SAMEINSTANCENUM</panel_timing>
<panel_date_from time="start_date" inclusive="yes"></panel_date_from>
<panel_date_to time="start_date" inclusive="yes"></panel_date_to>
<panel_accuracy_scale>1</panel_accuracy_scale>
<invert>0</invert>
<total_item_occurrences operator="EQ/NE/GT/GE/LT/LE">1</total_item_occurrences>
<item>
<hlevel>3</hlevel>
<item_name>item_name0</item_name>
<item_table>
<item_key>
item_key0| patient_set_coll_id:NNN |
patient_set_enc_id:NNN |masterid:NNN
</item_key>
<item_icon>item_icon0</item_icon>
<tooltip>tooltip0</tooltip>
<class>ENC</class>
<constrain_by_value>
<value_operator>

```

EQ/NE/GT/GE/LT/LE/IN/BETWEEN/LIKE[exact]/LIKE[begin]/ LIKE[end]/LIKE[contains]/Contains[database]

```

</value_operator>
<value_constraint>value_constraint0</value_constraint>
<value_unit_of_measure>unit</value_unit_of_measure>
<value_type>TEXT/LARGETEX/NUMBER/FLAG/MODIFIER</value_type>
</constrain_by_value>
<constrain_by_date>
<date_from time="start_date" inclusive="yes">2006-05-04</date_from>
<date_to time="start_date" inclusive="yes">2006-05-04</date_to>
</constrain_by_date>
<constrain_by_modifier>
<applied_path>\i2b2\Medications%</applied_path>
<modifier_key>\i2b2_DEMO\Dose</modifier_key>
<constrain_by_value>
<value_operator>

```

EQ/NE/GT/GE/LT/LE/IN/BETWEEN/LIKE[exact]/LIKE[begin]/ LIKE[end]/LIKE[contains]/Contains[database]

```

</value_operator>
<value_constraint> value_constraint0</value_constraint>
<value_unit_of_measure>unit_of_measure</value_unit_of_measure>
<value_type>TEXT/NUMBER/FLAG/MODIFIER</value_type>
</constrain_by_value>
</constrain_by_modifier>
<dim_tablename>dim_tablename0</dim_tablename>
<dim_columnname>dim_columnname0</dim_columnname>
<dim_dimcode>dim_dimcode0</dim_dimcode>
<dim_columndatatype>dim_columndatatype0</dim_columndatatype>
<dim_operator>dim_operator0</dim_operator> LIKE
<facttablecolumn>facttablecolumn0</facttablecolumn>
<item_color/>
<item_shape/>
<item_row_number/>
<item_is_synonym/>
</item>
</panel>

```

Element Name	Description
panel	A concept used to group items. The set of observation facts for each item filter are "unioned" at the panel level. The panel has the attribute "name", which is the key field for the panel and it is unique.
panel_timing	The values of the panel timing are the same as the values of the <query_timing> option in the query definition. The panel timing will override the query timing value if both have values specified.
Value	Description
ANY	ANY is the default value. The query result doesn't depend on the patient's encounter / visit value
SAME SAMEVISIT	The patients selected within the panel will have the same Encounter / Visit.
SAMEINSTANC ENUM	The patients selected within the panel will have the same Encounter / Visit and INSTANCE_NUM value in the fact table.

|

panel_number	A serial number starting with 1.
panel_date_from	Apply the observation fact's start date condition at the panel level.
panel_date_to	Apply the observation fact's end date condition at the panel level.
invert	The invert value could be "1" or "0". If the value is "1" then the query applies "NOT" condition for the entire panel.
total_item_occurrences	Select the events only if the total number of occurrence is greater or equal to this value.
item	Item contains the filter and query building information, like the item key, dimension table column name, data type, etc.
hlevel	Hierarchy level not required for this implementation

item_name	Nam of the item. It is not a required element and mostly for UI purposes.	
item_table	The name of the dimension table.	
item_key	This is the key field for the query and it is of four types, each one distinguished by the key format.	
<b>Key Type</b>	<b>Example</b>	
<ac:structured-macro ac:name="unmigrated-wiki-markup" ac:schema-version="1" ac:macro-id="5a167905-8e95-4ea2-a4e1-53fc144be799"><ac:plain-text-body><![CDATA[	Dimension Path Key	Item key representing the unique path of concepts available in metadata schema or the Ontology Cell. The format of the item_key is [\Dimension\concept path].]]></ac:plain-text-body></ac:structured-macro><item_key>\rpdr\RPDR\Diagnoses</item_key>
Patient Set	Providing the patient set id. <item_key>patient_set_coll_id:NNN</item_key>	
Encounter Set	Providing the patient's encounter set id. <item_key>patient_set_enc_id:NNN</item_key>	
Query Master Id	Providing another query's master id, aka query-in-query. <item_key>masterid:NNN</item_key>	

item_icon	Not currently used.				
tooltip	This is not a required element. It is used by the i2b2 clients.				
class	This is not currently used. It has been added to the specification and could be used to classify the data. For example, whether we need a fact's image data, text data, etc.				
constrain_by_value	To constrain the observation value of a concept. More information can be found in the CRC Design Document.				
value_operator	The conditional operator for filtering. The values are: <ac:structured-macro ac:name="unmigrated-wiki-markup" ac:schema-version="1" ac:macro-id="2bab2a8-3b9b-4ee3-8224-89f3f9f7dbd3"><ac:plain-text-body><![CDATA[EQ, NE, GT, GE, LT, LE, IN, BETWEEN, LIKE[exact], LIKE[begin], LIKE, LIKE[end], and LIKE[contains].]]></ac:plain-text-body></ac:structured-macro>				
value_constraint	<p>Example 'GT' Operator: &lt;constrain_by_value&gt;&lt;value_operator&gt;GT&lt;/value_operator&gt;&lt;value_constraint&gt;99.9&lt;/value_constraint&gt;&lt;value_type&gt;NUMBER&lt;/value_type&gt;&lt;/constrain_by_value&gt;</p> <p>Example 'IN' Operator: &lt;value_constraint&gt;(NEG,'NEGATIVE')&lt;/value_constraint&gt;</p> <p>Example 'BETWEEN' Operator: &lt;value_constraint&gt;100 and 200&lt;/value_constraint&gt;</p>				
value_unit_of_measure					
value_type	TEXT, LARGETEXT, NUMBER, FLAG  The following shows how the SQL will be built for the different operators:				
VALUE_TYPE	VALUETYPE_CD	TVAL_CHAR	VALUE_FLAG_CD	OBSERVATION_BLOB	NVALNUM
TEXT	T	*			
LARGETEXT	B			*	
NUMBER	N	*			*
FLAG			*		

constrain_by_date	Apply start and end date constraint for the item
date_from	<date_from time="start_date/end_date" inclusive="yes"></date_from>
date_to	<date_to time="start_date/end_date" inclusive="yes"></date_to>
constrain_by_modifier	Apply modifier constraint for the item. The MODIFIER_CD column in the fact table is used to apply this constraint to the fact.
applied_path	The applied path for the modifier. <applied_path>\i2b2\Medications%</applied_path>
modifier_key	The modifier's path. <modifier_key>\i2b2_DEMO\Dosage{color:#0000ff}</modifier_key>
constrain_by_value	Same as the <constrain_by_value> section at the item level.

dim_tablename	The name of the dimension table to join with the fact table. i.e. 'CONCEPT_DIMENSION', 'PROVIDER_DIMENSION', etc. This information is used to construct the dimension filter SQL.  <i>Example:</i> <code>SELECT * FROM OBSERVATION_FACT WHERE facttablecolumn IN (SELECT dim_columnname FROM dim_tablename WHERE dim_columnname LIKE dim_dimcode )</code>
dim_columnname	The name of the column in the dimension table.
dim_dimcode	The is the same as the concept path i.e. 'i2b2\Diagnoses'
dim_columndatatype	The data type of the dimension table's filter column. The default is string.
dim_operator	The conditional operator for filtering. The default is the 'LIKE' operator. Other values are 'LE', 'GE', and 'EQ'
facttablecolumn	This is the name of the column in the OBSERVATION_FACT table to join the dimension table.
item_color	UI rendering attribute.
item_shape	UI rendering attribute.
item_row_number	UI rendering attribute.
item_is_synonym	UI rendering attribute.