

# i2b2 6.1.1 Release Notes

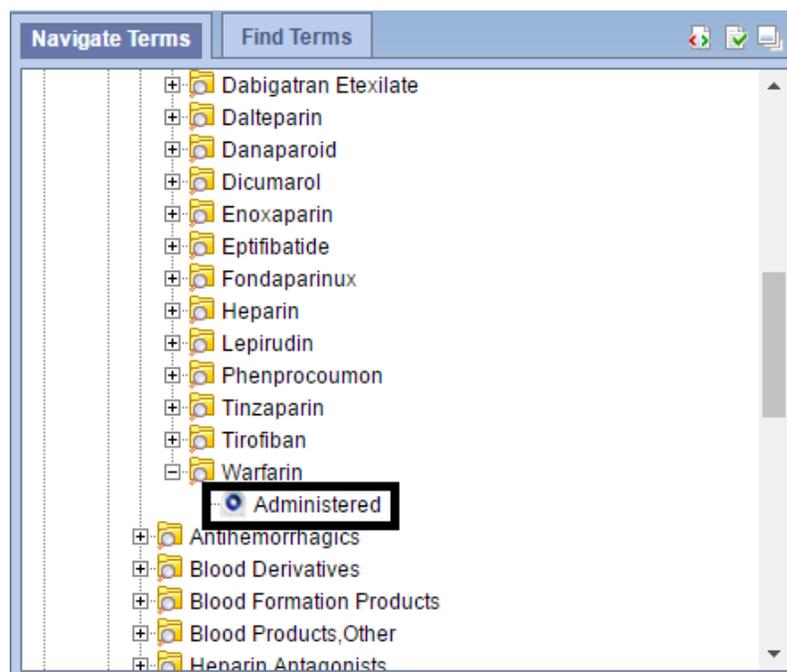
Release 6.1.1 of the Health Sciences South Carolina (HSSC) Informatics for Integrating Biology and the Bedside (i2b2) query tool was moved to production on May 2, 2016. The release includes a refresh of i2b2 data for HSSC and site projects as well as the addition of several new data types.

## The scope of this release included:

- Bringing all existing i2b2 data up to March 31, 2016
- Adding Laboratory result data to the HSSC and site projects up to March 31, 2016
- Adding Medication order data to site projects up to March 31, 2016 (previously existed only in HSSC)
- Adding Medication administration data to HSSC and site projects up to March 31, 2016
- Adding Vitals (height, weight, adult BMI) data to HSSC and applicable site projects up to March 31, 2016

## Enhancements

- ICD-10-CM and ICD-10-PCS tree ontologies for Diagnoses and Procedures were added to all projects, as well as the ability to restrict 'Search by Names' and 'Search by Codes' by these coding systems.
- The Logical Observation Identifiers Names and Codes (LOINC) tree ontology for Lab results was added to all projects, as well as the ability to select LOINC as a coding system in 'Search by Codes'.
- Patient demographic concepts were normalized in site projects to preserve consistency with the HSSC project.
- Medication administrations are able to be queried using i2b2 modifiers. As shown below, 'Administered' modifiers (representing the medication administration) are located beneath each medication name. To query patients with a medication ordered, use the medication concept folder with the corresponding medication name. To query patients with the medication administered, use the 'Administered' modifier under the medication of interest.



- Ranges for Vital values (height, weight, adult BMI) are now able to be queried. To query vitals, drag and drop either the height, weight, or adult BMI concepts from the Navigation Tree to a Group. Upon dropping the concept, the pop-up below will appear allowing the user to specify range criteria. In the example below, the user is searching for adult patients with a BMI between 20.0 and 30.0 kg/m<sup>2</sup>. To search for all patients with any BMI values, select 'No Value' in the box below as opposed to 'By Value'.

**Choose value of BMI (Test:VITAL:BMI)**

Enter your search criteria.

No Value

By Value

Please select operator:  
BETWEEN

Please enter values:  
20 - 30

Click on a bar segment to help specify a value or range:  
Range in kg/m<sup>2</sup>

Units = kg/m<sup>2</sup>

OK Cancel

### Fixes

- Previously, queries involving admission source in the SRHS project resulted in near zero patient counts. SRHS admission source codes have been corrected and queries in this project will now reflect accurate patient counts.
- To avoid confusion with the Visit-related concepts, Encounter Type and Encounter SubType, Admission Type has been removed from HSSC and site projects. Encounter Type may be used to query patients with inpatient, emergency department, or outpatient encounters, and Encounter SubType may be used to query more specific categories within each encounter type.

### Things to Consider

- When constructing queries using 'Adult BMI' under 'Vitals', please be aware that this will only return patient counts for adults  $\geq 20$  years of age. However, searches using 'Height' and 'Weight' will return all patients that fit the specified criteria, regardless of age.

### Targets for Future Release

- Adding the ability to query Lab result ranges for a select subset of high frequency and/or high priority lab tests
- Adding BMI and corresponding BMI-for-age percentile for children and adolescents aged 2 through 19 years of age

**This release includes the following historical data in i2b2 by Project:**

<b>Data Type</b>	<b>HSSC</b>	<b>GHS<sup>1</sup></b>	<b>MUSC<sup>2</sup></b>	<b>PH</b>	<b>SRHS<sup>3</sup></b>
<b>Patients</b>	1/2007 - 3/2016	1/2007 - 12/2015	1/2007 - 9/2015	1/2007 - 3/2016	1/2011 - 3/2016
<b>Encounters</b>	1/2007 - 3/2016	1/2007 - 12/2015	1/2007 - 9/2015	1/2007 - 3/2016	1/2011 - 3/2016
<b>Diagnoses</b>	1/2007 - 3/2016	1/2007 - 12/2015	1/2007 - 9/2015	1/2007 - 3/2016	1/2011 - 3/2016
<b>Procedures</b>	1/2007 - 3/2016	1/2007 - 12/2015	1/2007 - 9/2015	1/2007 - 3/2016	1/2011 - 3/2016
<b>Medication Orders</b>	1/2010 - 3/2016	1/2012 - 12/2015	1/2010 - 9/2015	1/2011 - 3/2016	1/2011 - 3/2016
<b>Medication Administrations</b>	1/2010 - 3/2016	1/2012 - 12/2015	1/2010 - 9/2015	1/2011 - 3/2016	1/2013 - 3/2016
<b>Lab Results</b>	1/2013 - 3/2016	1/2013 - 12/2015	1/2013 - 9/2015	4/2015 - 3/2016 <sup>4</sup>	1/2013 - 3/2016
<b>Vitals (Height/Weight/BMI)</b>	4/2008 - 3/2016	-	4/2008 - 9/2015	-	1/2011 - 3/2016

<sup>1</sup> Last GHS data extract received on 12/31/2015

<sup>2</sup> Last MUSC data extract received on 9/19/2015

<sup>3</sup> SRHS missing historical data feeds from 8/16/2013 to 7/9/2014

<sup>4</sup> PH did not turn on the Lab feed until 3/31/2015

**Note:** The table above presents time frames for data in i2b2. It does not reflect the data or time frames currently available in the Clinical Data Warehouse (CDW), which has greater coverage and is updated more frequently.