

CDW 5.1.1 Release Notes

Release 5.1.1 of the HSSC CDW and i2b2 was moved to production on June 10, 2015. The release includes the latest i2b2 upgrade to Version 1.7.04 as well as the following enhancements and fixes to CDW Release 5.1:

Upgrade Summary from Version 1.6.08 to 1.7.04

- Please see the **Official i2b2 Software Release Notes** for detailed descriptions of each release within Version 1.7 (<https://community.i2b2.org/wiki/display/releases/1.7+Versions>).

New Features

- Temporal Queries (New Temporal Query Tool View)
 - The **temporal query** is a new type of query introduced in release 1.7. There are two components to these queries that make them a little more complex than the type of queries available prior to 1.7 (classic i2b2 queries). The first component to these queries is the list of events defined by the user. The second component is the relationship between the events. This relationship is referred to as a Temporal Relationship, which is best described as how the different events relate in regards to the time in which the event(s) occurred. Users can also define a patient or event population they wish to run the temporal query against. This step is optional and is not required in order to run the temporal query.

How do I perform a Temporal Query?

The instructions below serve as a reminder of the steps needed to set up a Temporal Query. Full instructions with pictures are available in the i2b2 User Guide available by pressing the Help button in the upper right section of the screen.

1. Change the **Temporal Constraint** from *Treat all groups independently* to **Define sequence of events**.
2. A second entry appears with a drop down displaying the default selection of **Population in which events occur**. Select your base set of patients (If you do not provide a filter here, the entire patient population is used).
3. Press the drop down arrow next to **Population in which events occur** and select **Event 1**. Define your *Event 1*.
4. Change drop down from **Event 1** to **Event 2** (*optional step and you can add events if you need more than two*).
5. Change drop down from **Event #** to **Define order of events**. A new set of columns appear allowing you to define the rules related to the events.
6. Press the **Run Query** button.
7. Temporal queries have a (t) in front of the name in the **Previous Queries** panel.

See the following document for a detailed example of running a Temporal Query (<https://myresearch.ucsf.edu/sites/myresearch.ucsf.edu/files/wysiwyg/V1%207%20Web%20Client%20Features.pdf>).

- Find Terms: New feature called "Jump to Term in Tree"
 - A new feature called **Jump to Term in Tree** has been added to the *Find Terms* view. Users can now easily jump directly to a term in the *Navigate Terms* view from the *Find Terms* view. Once a term is found in the *Find Terms* view the user can click on the term using the *right mouse button* to display the pop-up menu. Selecting "Jump to Term in Tree" from the pop-up menu will bring the *Navigate Terms* view into focus and the hierarchical tree will automatically open to the location of the term selected in the *Find Terms* view.

Enhancements

- The ontology for ICD-9 diagnoses codes, which associates specific ICD-9 codes with descriptions and various levels of categorization, has been updated in Version 1.7. The updated ontology includes ICD-9 codes that could not be referenced previously in Version 1.6.

Fixes

- Site-specific race descriptions were used in the place of HSSC-harmonized race descriptions for about 30% of patients in CDW. For example, 34% of Caucasian patients were assigned the site-specific description 'Caucasian' while the rest were assigned the HSSC-normalized description 'White.' Issues manifesting in i2b2 included incorrect patient counts for queries involving race in the HSSC project as well as incorrect race breakdowns in the Demographics plug-in for all projects.
 - A hotfix was applied to CDW which corrected the issue in i2b2. Patient count inaccuracies attributed to this issue are now correct in the HSSC project as well as in the Demographic plug-in for all projects.

Things to Consider

- Previous queries involving diagnoses cannot be re-executed in the new version of i2b2. This is due to the upgraded ICD-9 ontology (mentioned above) in which the ICD-9 code next to the diagnosis description is now removed. For example, what was once 'Diabetes Mellitus (250)' in the *Navigate Terms* view is now 'Diabetes mellitus.' Previous queries involving diagnoses will still return counts associated with the query originally, but will not re-run if the user chooses *Run Query*.