**Integrating PheWAS and the Phecode (PheWAS Code) Ontology with i2b2**

**(Supplementary Information)**

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Phecode ontology for i2b2:

<http://informatics.mayo.edu/phema/images/e/e3/PheWAS_ONT_i2b2_v1_2_1.txt.zip>

Instruction:

PheWAS codes (PheCode from Josh Denny's lab) in i2b2 ontology format (v1.2).

* Please unzip and load this script to your i2b2 ontology cell database (i2b2metadata).
* Then, you need to insert a line to your table\_access table in the ontology cell database:

INSERT INTO table\_access (c\_table\_cd,c\_table\_name,c\_protected\_access, c\_hlevel, c\_fullname, c\_name, c\_synonym\_cd, c\_visualattributes, c\_facttablecolumn, c\_dimtablename, c\_columnname, c\_columndatatype, c\_operator, c\_dimcode, c\_tooltip) VALUES ('PHEWAS','PHEWAS','N', 1, '\PheWAS\', 'PheWAS', 'N', 'CA', 'concept\_cd', 'concept\_dimension', 'concept\_path', 'T', 'LIKE', '\i2b2\Diagnoses\', 'PheWAS');

* To make PheCode searchable in i2b2 webclient, please insert (or update) these four rows to schemes table in ontology cell

insert into schemes (c\_key, c\_name, c\_description) values ('PHECODE\_I:', 'PHECODE\_I', 'PheCode inclusion for cases');

insert into schemes (c\_key, c\_name, c\_description) values ('PHECODE\_E:', 'PHECODE\_E', 'PheCode exclusion for controls');

insert into schemes (c\_key, c\_name, c\_description) values ('PHECODE\_MI:', 'PHECODE\_MI', 'PheCode inclusion for cases in matched view');

insert into schemes (c\_key, c\_name, c\_description) values ('PHECODE\_ME:', 'PHECODE\_ME', 'PheCode exclusion for controls in matched view');

* No modification to the CRC database is required, but please use native concept\_dimension table in CRC cell.

PheWAS i2b2 on KNIME:

<http://informatics.mayo.edu/phema/images/2/28/PheWAS_i2b2_v2_knime.zip>