REDCap – How to enable and use the Biomedical Ontology Field

An ordinary text field on a survey or data entry form can have a special feature enabled that provides auto-suggest functionality for real-time searching within biomedical ontologies, such as RxNorm, ICD-9, ICD-10, Snomed CT, LOINC, etc.

To enable a field for the Biomedical Ontology use:

1. Create a <u>Text Box</u> Field.

2. <u>Enable searching within a biomedical ontology:</u> select the ontology you would like to use from the drop-down list. Once a selection is made from this drop-down list, the only values that will be saved in this field will be values from the search list. You will not be able to type any free-form text into this field unless it is a valid value from the search list.

Some commonly used biomedical ontologies are:

  a. CPT
  b. ICD 9 CM
  c. ICD 10 CM
  d. ICD 10 PCS
  e. LOINC
  f. NCFRT
  g. RxNORM
 h. SNOMEDCT

3. Field Label: Name the field with a label or question that best represents the ontology selected. For example, you could name the field as the selected ontology or with a question such as, "What is the patient diagnosis?"

4. Variable name: Provide a variable name that describes what you are capturing, but try to keep the variable name as short as possible. For example, you could use the ontology name (ex: rxnorm) as the variable name.

5. Click on Save for the field type.
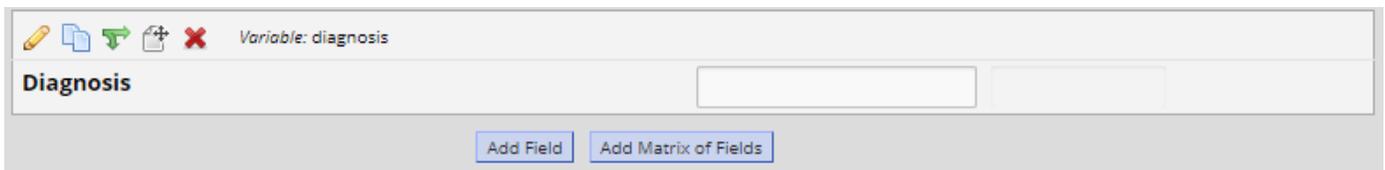
6. The new field is now a dynamic field. When you begin typing in a keyword into the field, the system will automatically generate a drop down of selections based on the ontology and keyword.

   For example, the ICD10CM ontology was selected for the field below. When entering a keyword of '*park*' for Parkinson's disease into this field, notice the drop-down list that begins to generate.
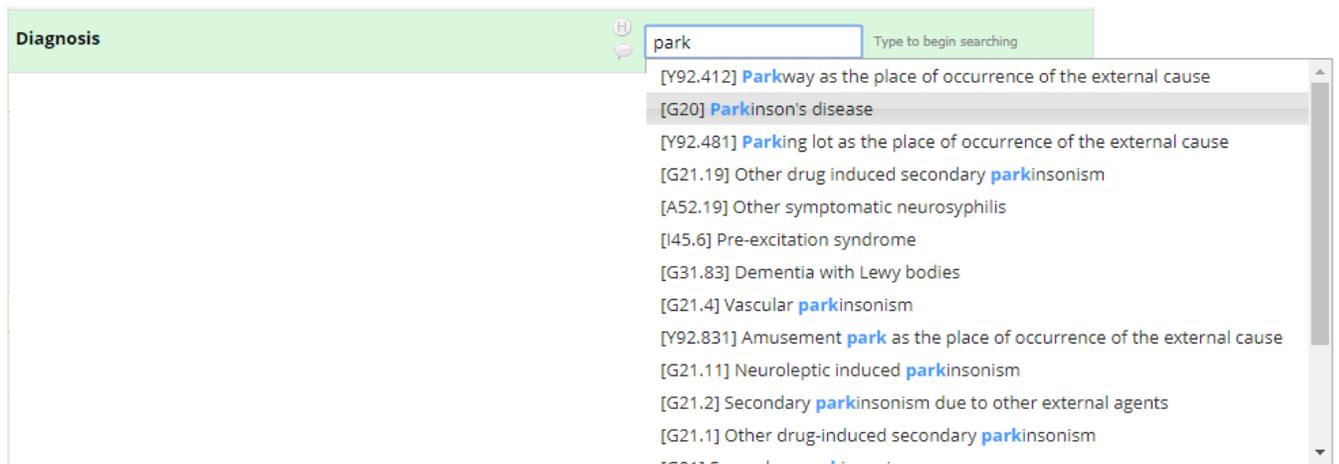
When the selection is made for Parkinson's disease, the field will prefill with the disease in red letters with the correct code.

Data Entry view:

| Diagnosis | | Parkinson's disease | G20 |

7. The data export Excel fields will appear as this:

- o CSV/Microsoft Excel (labels) output:

	A	J
1	Record ID	Diagnosis
3	2	Parkinson's disease

- o CSV/Microsoft Excel (raw data) output:
  The raw value that is saved for the field is the 'notation' (often an alpha-numeric code) for the given ontology.

	A	J
1	record_id	diagnosis
3	2	G20