**The MEBDO project: building ontologies to link the Medicare data, Census data and BLS data**

* **First stage:** 
  + Ontology representation for link the outpatient, inpatient and physician data.
  + DRG coded services, APC coded services are classes of Medicare services.
  + The data in the table downloaded from CMS website will be instances.
  + Currently put the address, zip code, city and state of provider from outpatient data and inpatient data as instances. Only link to provider.
  + 500 outpatient data in, 500 inpatient data in.
  + Issue 1: redundant city and state;
  + Issue 2: too big data-set. All hospital information for out patient services in 2012 table has 157,755 rows, which takes 72 hours to transform into a 258M owl file. It may not need to put the triples of hospital into the ontology at the moment. One can link services direct to the places.
* **Second stage:**
  + Issue 1:
    - Reuse URIs from DBpedia, the city and state will be in the form of : <http://dbpedia.org/resource/Hephzibah,_Georgia>
    - Transfer the extracted city, county, state and zipcode information into an independent ontology, which will then link to census data modeling
  + Issue 2:
    - All hospital can be a separate rdf file, with defined relations of hospital located in city, state, hasZipCode(data type), hasStreetAddress(data type)
    - However, hospital’s address can be changed. Hospital may close. Check the <http://www.ahadataviewer.com>
    - Change the representation of Medicare service, make direct link to city, state, using occurs in city, occurs in State.
  + Next step:
    - 1. Build ontology for city, county and states in US.
    - 2. Change the representation of current ontology, put the payments, service counts as datatype.