

Lab 3: Data Standards & Ontologies

Instructions

In Lab 2, you identified 3 data warehouses associated with public health. Choose one of those data warehouses (or a particular public health related topic such as metabolomics, metagenomics, cancer, etc.) and identify the Data Standards associated with it by doing the following:

- Provide a few sentence description of the data standard you've chosen to work with and:
 - why this data standard is of interest to you
 - how it relates to public health
- Provide a website for the data standards
- Identify a scientific paper associated with the data standards and get the PDF of the paper. Attach the PDF with your final report.
- Describe the data standards in your own words and what they cover. Are they missing key aspects (do they cover data collection and analyses)? What are the top 5 descriptors of the data standards?

Now, identify a second set of standards on a second topic and repeat the above steps. Describe common elements in the two data standards you've examined. Why are these in common or why aren't there any in common? Describe how do data standards impact public health decisions?

Choose one of your two data standards and develop an ontology that describes how information will be collected, integrated, and available to users based on the data standards and data warehouse.

Finally, what will you do with your growing body of scientific literature? How can you organize such literature and have it immediately available for your lab write-ups and your research?

The report

Develop a brief report (I recommend a Word (or other text editor) document) for your problem set that includes answers to all of the questions and instructions posed above, showing tables or figures where appropriate.

Save your report as a PDF file and submit your report through the course 2GW site.

Due date

Day 7, Week 4