JOE BREW (UFID: 0402-8902) PHC 7065 Assignment 1 Concept Paper

# Assignment 1: Concept Paper

Write a one page "concept paper" outlining your project. Use the curiosity, question, aim, hypothesis format as discussed over last week's Skype session.

### Curiosity

I would like to know how the built environment (roads, sidewalks, parks, kinds of shopping and food stores nearby, traffic laws, etc.) affects a population's susceptibility to obesity, particularly among young people.

#### Question

Does the built environment of an area (neighborhood, census tract, city, county, etc.) have a *causal* impact on the likelihood of the youth residents of that area to develop obesity?

#### Aim

My main aim for this project is to determine the extent to which the built environment exerts an influence on an area's residents propensity to develop obesity. My secondary aims are

- to identify which factors of the environment increase one's risk for obesity, and which factors are "protective"
- quantify the relationship between these factors and the likelihood of developing obesity
- carry out a cost-effectiveness analysis, keeping in mind that the factors which are
  most closely linked with obesity may or may not be those that are realistically
  "modifiable" (from the point of view of a public health practitioner)
- quantify the return on investment for built environment modifications, using a cost-utility approach as well as a cost-effectiveness approach

## **Hypothesis**

I hypothesize that an area's built environment is causally associated with the health outcomes of that area's residents, particularly the likelihood of that area's younger residents to develop obesity. My justification for this hypothesis is that

- Previous studies have highlighted the importance of built environment in health outcomes
- Intuitively, "walkability" should correlate with how much one walks, and availability
  of certain kinds of foods such correlate with consumption of those foods, etc.

Unlike previous studies, I hypothesize that this relationship is *causal* and can be demonstrated as such through longitudinal methods.