

Coursera Capstone Project Report

Using School Immunization Rates and Venue Location Data to Choose Medical Clinic Locations

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Introduction/Business Problem:

The business problem that we have is understanding how to choose the ideal location for opening a medical clinic. The audience that would be interested in solving this problem are medical professionals and medical clinic stakeholders. As stakeholders their primary interests would be due to public health concerns as well as their return on investment. We will be using the city of Toronto as an example to understand this problem and create an ideal solution. By assessing the supply and demand of medical services we can address this problem. One method that we can use to assess the demand is by looking at the immunization rates of all nearby schools. Then in order to understand the supply of medical support we will look at existing medical clinics in the local area.

Data:

The data used to solve this problem will be the Immunization Coverage for Students Data from the Toronto Open Data portal, and the Foursquare location data in order to search and count medical clinics near all Toronto schools. The immunization data has immunization rates for each individual school, as well as latitude and longitude values which we can then use to search for nearby medical clinic venues within a given radius.