

HOSPITAL LOCATION RECOMMENDATION CAPSTONE PROJECT

June 9, 2019 Mehrnaz Siavoshi

INTRODUCTION

Hospitals are a major part of any city as maintaining citizen health is vital to a thriving community. For this project, a fictional private company is looking to found a new hospital in Toronto. They are looking for help to decide where to establish the new hospital and health center.

There are a variety of things to consider when answering this question. First, the company is interested in equal access to heath care across the city. Therefore, they would like to know what the average income and population is around the hospitals that already exist in the city and want to find places where, either because of low income or high population, hospitals would be needed.

Additionally, the company recognizes that the health of a community is not only indicated by hospitals located there. The company would also like to consider health-oriented venues like gyms, health food stores, and more in different communities to truly pinpoint where in the city the most health assistance is needed.

By the end of this project, I will identify key areas in the city that would benefit most from the addition of a new hospital.

DATA

Location Data

Information about the neighborhoods in Toronto has been previously provided by the client. This data set gives the different neighborhoods and their respective latitude and longitudes. This will allow us to build a descriptive map of Toronto.

Health Data

There are a variety of sources we can use to determine hospital locations in Toronto. For this project, I will use both Wikipedia's page on hospitals in Toronto and the Foursquare API to get more information for each location.

Additionally, I will use the Foursquare API to find axillary health venues like gyms, health food stores, and more. This data will help build a broader picture of the health needs of the various communities in Toronto.

Health Statistics

Finally, to build a more robust project and motivation for building a new hospital in low income or high population areas, I will pull in correlation data from government sources that links income and access to health care to preventable disease. For example, the rates of diabetes are highest in low income communities. Information like this provides a compelling story for the development of a new hospital.