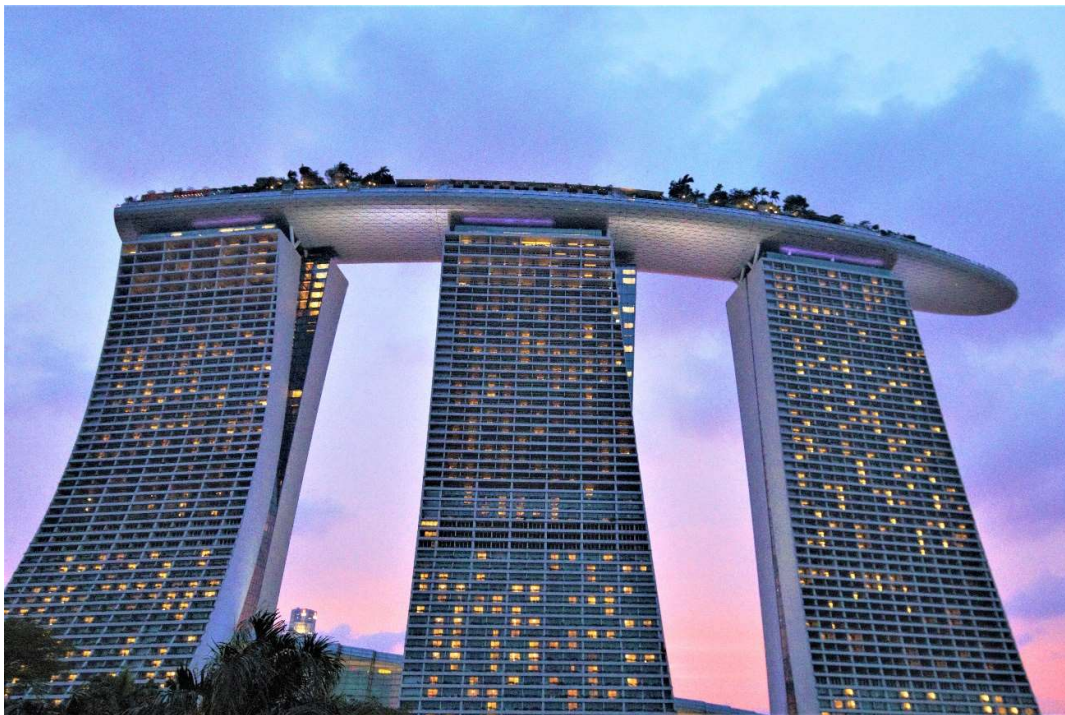


IBM Applied Data Science Project Coursera Capstone

Potential Places to Establish Hospitals in Singapore “Business Understanding”



Vincentius Indra Sulaiman
March 2020

Introduction

Business Understanding

Due to the increasing median age of Singaporeans (see Figure 1), hospitals will become more important and be an integral part of Singaporeans. According to Statista, percentage of older population in Singapore is also found to be increasing over the years (see Figure 2). This phenomenon of ageing population will assert the importance of hospitals to cater the medical needs of Singaporeans. Singapore health care quality is known to be one of the best in South East Asia (International, 2020)¹. According to Ranking Web of Hospitals², there are 11 Singapore hospitals from the top 30 hospitals in South East Asia. This fact further supports the economic opportunity of building new hospitals in Singapore as the health care market is not only limited to Singaporeans. However, the scope of the present study will be limited to Singapore population, not taking into account the overseas patients.

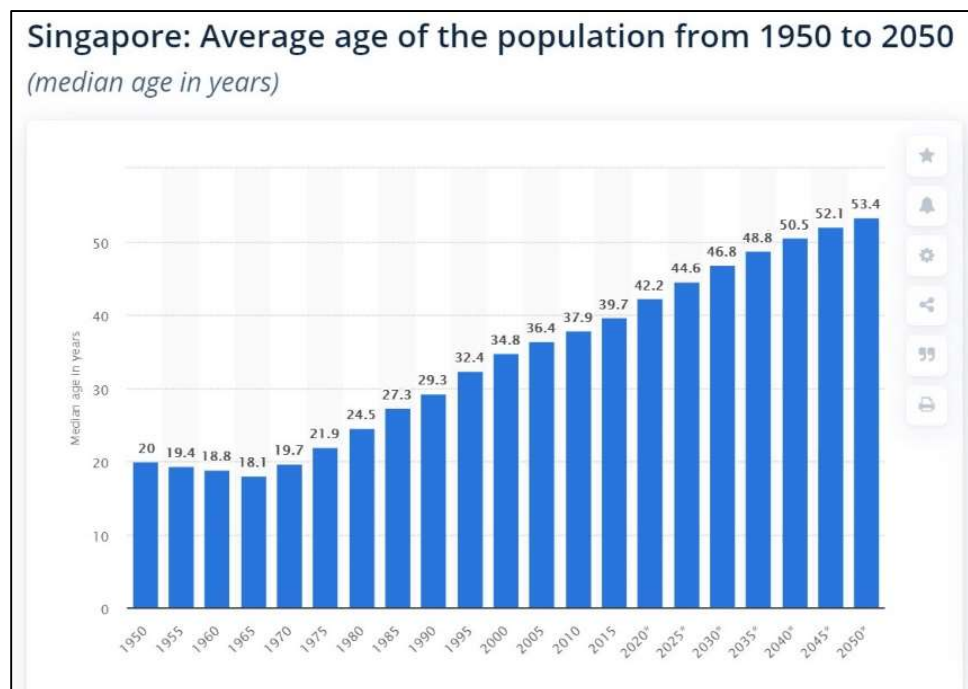


Figure 1. Median Age of Singaporeans (statista.com)

Based on prior knowledge, it is known that most hospitals or medical centres are located in central and southern areas of Singapore. However, Singapore population in general does not reside in those areas only (see Figure 3). Therefore, it becomes an interest to find which areas in Singapore that have relatively higher population density and less amounts

¹ (International, 2020)

² (South East Asia, n.d.)

of medical centres. The results of this investigation will be very handy and relevant for urban developers specialising in the construction of such medical centres of hospitals. Thus, valuable economic opportunities may be discovered by this study.

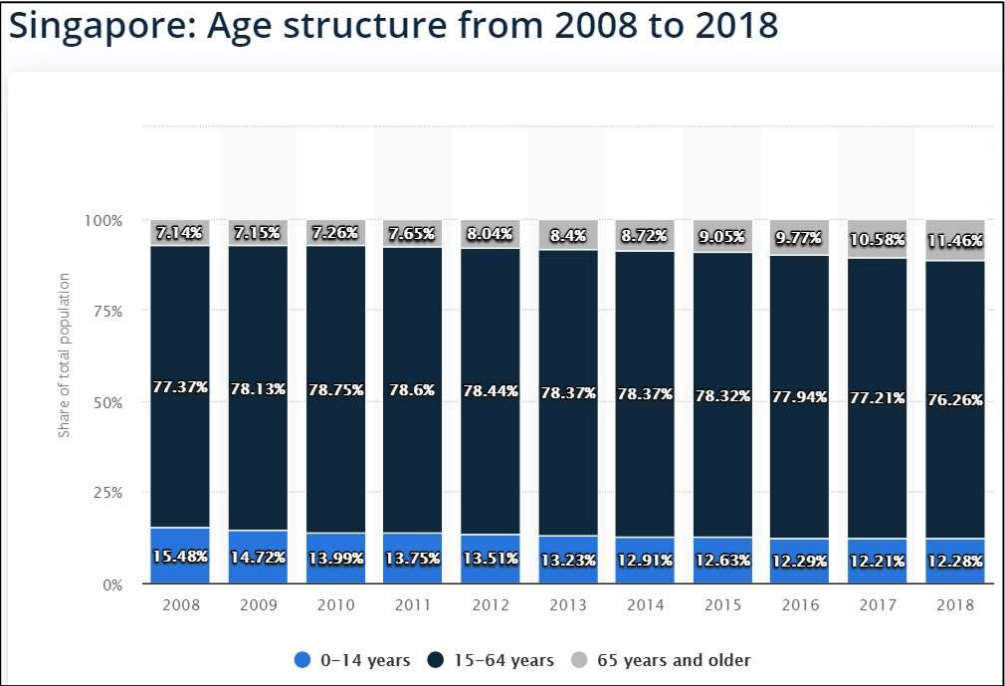


Figure 2 Singaporean Age Structure (statista.com)

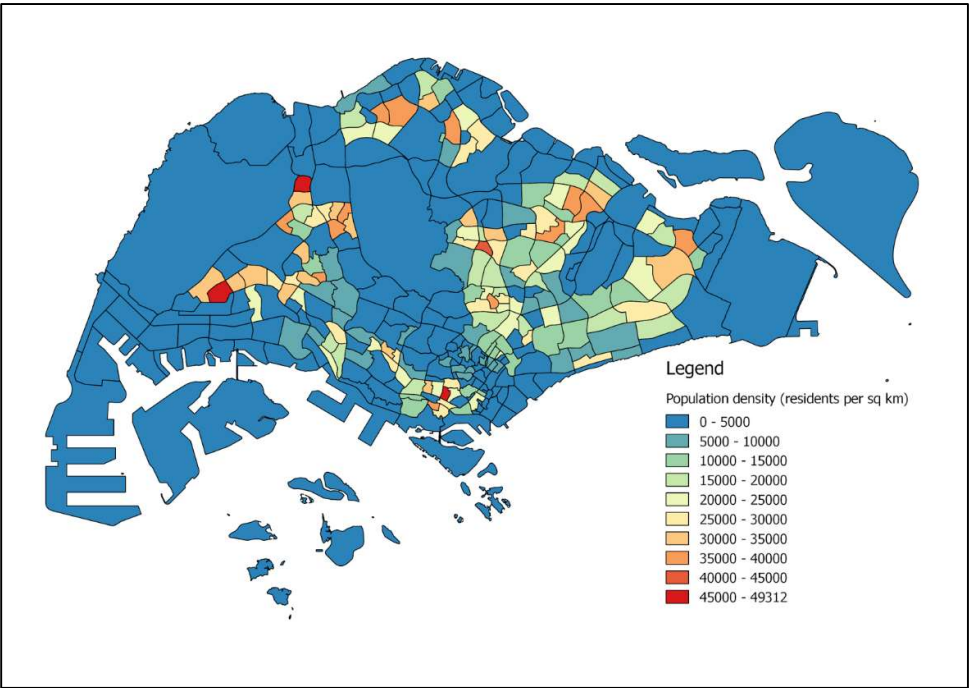


Figure 3 Singapore Population Density Heatmap (mothership.sg)

Study Objectives and Target Market

This study is specifically intended for:

1. Property developers and investors looking for opportunities to build new hospitals,
2. Government agencies, in particular Singapore Ministry of Health (MOH), which have interest in developing certain parts of Singapore related to healthcare industry, and
3. Individuals and families residing in certain areas of Singapore which currently have relatively lower density of hospital or medical centres despite the higher population density.

References:

- <https://www.statista.com/statistics/378424/average-age-of-the-population-in-singapore/>
- <https://www.statista.com/statistics/378566/age-structure-in-singapore/>
- https://hospitals.webometrics.info/en/Asia_Pacific/South%20East%20Asia
- <https://mothership.sg/2016/10/nifty-map-shows-which-parts-of-singapore-has-densest-population-guess-which-is-no-1/>
- https://en.wikipedia.org/wiki/New_towns_of_Singapore