In this part, we also constructed origin-destination matrix with percentages for further analysis of hospital monopoly. Therefore, the origin-destination matrix here is a matrix which is each cell represent the proportion of trips from origin (row) to the destination (column).

We can see that about 72% of commercial payers in 5 revised regions (RR1), who are defined as well-paid patients, tend to go to hospital in revised region 1 when they have heart and circulatory system issues. When it comes to musculoskeletal system diseases, nearly 50% of commercial payers also prefer to go to hospitals in revised region 1. Since those mentioned percentage are above or near 50%, we can conclude that hospitals in revised region 1: Burlington are monopoly in both pricey and high-end care such as heart and circulatory and routine and standard care such as musculoskeletal system.

We also find out that the percentage of commercial payers who go to RR1 for heart and circulatory system is more than 20% higher than those who go to RR1 for musculoskeletal system. Then we conclude that well paid patients from private commercial insurers are more willing to go to RR1 for high-end and pricey care than routine and standard care.

As for government-supported payers that are in the Medicare program, hospitals in revised area 1 are also attractive to them in terms of heart and circulatory & musculoskeletal system diseases. In particular, 48.6% of people in Medicare tend to go to RR1 when facing heart and circulatory diseases while 38.02% of them prefer hospital in RR1 in terms of musculoskeletal system diseases. Although those two percentages are lower than 50%, when looking at the percentages of people in Medicare who go to hospitals in other revised areas, the market shares are much less than those of people who go to RR1. Therefore, hospitals in RR1 are still in monopoly in dealing with heart and circulatory & musculoskeletal system diseases.

We also find out that the percentage of payers in Medicare who go to RR1 for heart and circulatory system is 10% higher than those who go to RR1 for musculoskeletal system. We conclude that well patients who are supported by the government are more willing to go to RR1 for high-end and pricey care than routine and standard care.

Meanwhile, the percentage difference between heart and circulatory system and musculoskeletal system for commercial payers is 1 time that for government-supported payers, which reveals that commercial payers are more sensitive to the different types of care than Medicare payers. Commercial payers are more likely to go to RR1 than Medicare payers in general.

One thing needs to mention is that most percentages are concentrated on the diagonal line, expect for RR2. In particular, as for circulatory system, only 40% commercial payers in RR2 are treated locally. We form a hypothesis that maybe the medical treatment of circulatory system is not that developed and most commercial payers will choose hospitals in other RRs. There are only 64% of Medicare payers in RR2 who choose to go to local hospitals, the percentage is also not very high.