**A. Initial observations based on the plot above**

* Overall, rate of readmissions is trending down with increasing number of discharges
  + This is not obvious. Seems a flat line.
* With lower number of discharges, there is a greater incidence of excess rate of readmissions (area shaded red)
  + Seems correct. However, the vast majority of the data in the red shaded area have quite symmetric readmission rate around 1 (similar number of readmissions below and above).
* With higher number of discharges, there is a greater incidence of lower rates of readmissions (area shaded green)
  + Not very obvious. Might be true from 800 to 2000. Above that the number of readmissions increase.

**B. Statistics**

* In hospitals/facilities with number of discharges < 100, mean excess readmission rate is 1.023 and 63% have excess readmission rate greater than 1
* In hospitals/facilities with number of discharges > 1000, mean excess readmission rate is 0.978 and 44% have excess readmission rate greater than 1
* I would add readmission info about 2.5%, 25%, 50% (median), 75% and 97.5% of percentiles.

**C. Conclusions**

* There is a significant correlation between hospital capacity (number of discharges) and readmission rates.
  + Not true. The chart doesn’t show this.
* Smaller hospitals/facilities may be lacking necessary resources to ensure quality care and prevent complications that lead to readmissions.
  + If the size of the hospital is measured by the number of discharges, then this statement is also misleading. How do you define small? There is no numerical definition. It seems there are no systematic variations in the data, it’s a symmetric distribution around the mean.

**D. Regulatory policy recommendations**

* Hospitals/facilties with small capacity (< 300) should be required to demonstrate upgraded resource allocation for quality care to continue operation.
  + This recommendation is based on an unfounded (speculative) assumption that the smaller hospitals may be lacking necessary resources to ensure quality care (previous point). We need to investigate this further to be able to come up with a recommendation. The data shows great variability in the < 300 range. It has some clear outliers (above 1.2) which might be visually impactful, but the mean and the median seem to be around 1, might be even less.
* Directives and incentives should be provided for consolidation of hospitals and facilities to have a smaller number of them with higher capacity and number of discharges.
  + This is not based on the data. We need to test the hypothesis that the larger hospitals perform better. Also we need a consistent definition of size. In point B size is defined as < 100, in point C it’s defined as < 300.