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Background

- ✔ Patient Safety Indicators are measures that monitor in-hospital complications and adverse events following surgeries and procedures.
- ✔ Performance on a single PSI measure cannot reliably indicate actual quality differences among specialties.
- ✔ Integrating multiple PSIs and visualize performance over time will produce a more complete picture for patient safety care.

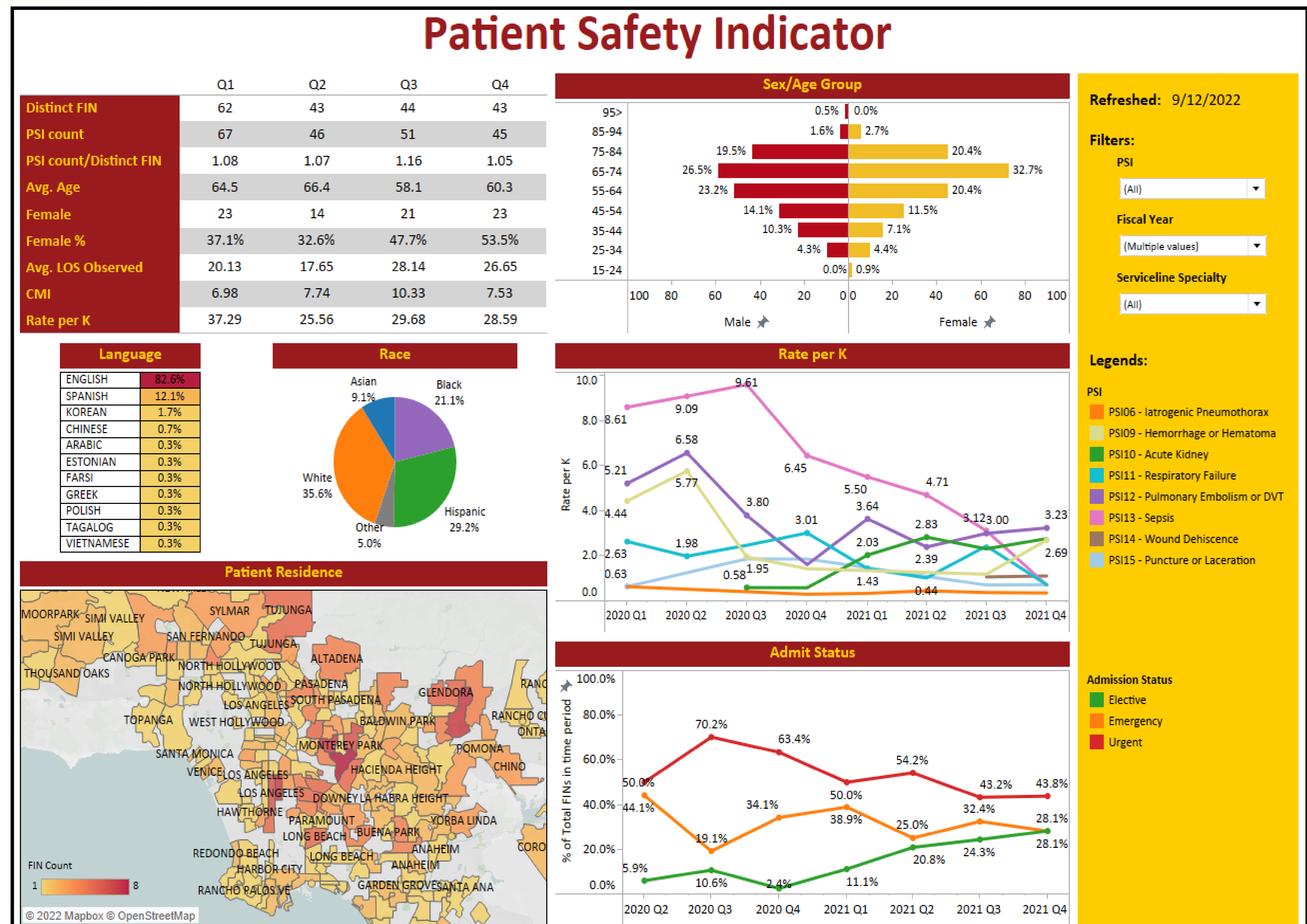
Tableau Visual Analytics

- ✔ As a business intelligence tool, Tableau provides various interactive visualizations including tables, maps, bar charts, line charts, bubble charts etc.
- ✔ It turns hospital data into actionable insights with speed and ease, and aids in confirming basic hypotheses.

Methods

- ✔ PSI patient level data from January 2018 through present was integrated across various sources into a data mart.
- ✔ Tableau (v2021.2) was used to develop interactive dashboard through a simple drag and drop interface.
- ✔ The dashboard not only holds charts and maps for storytelling at facility and specialty level, but also replaces manual reporting effort and accelerates data-driven decision making.

Measurement & Analysis (Example Template)



Key Takeaways

- ✔ Customized dashboard was developed at specialty level to show pattern overtime for PSI incidence, the impact of patient case mixed index, patient demographics, and ICU stay.
- ✔ Through Patient Safety Indicator Dashboard, multidisciplinary teams gain better understanding of numerous factors involved in quality improvement process for each specialty.
- ✔ It essentially enables teams to prioritize the critical items to improve within a complex process, which prevents potential post-surgical complications and leads to optimal clinical outcomes.