Introduction to Analytics

LocalTek Healthcare Analytics

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Goals for this lesson

- Learn about two popular python packages for plotting data
- Create a couple of basic plots

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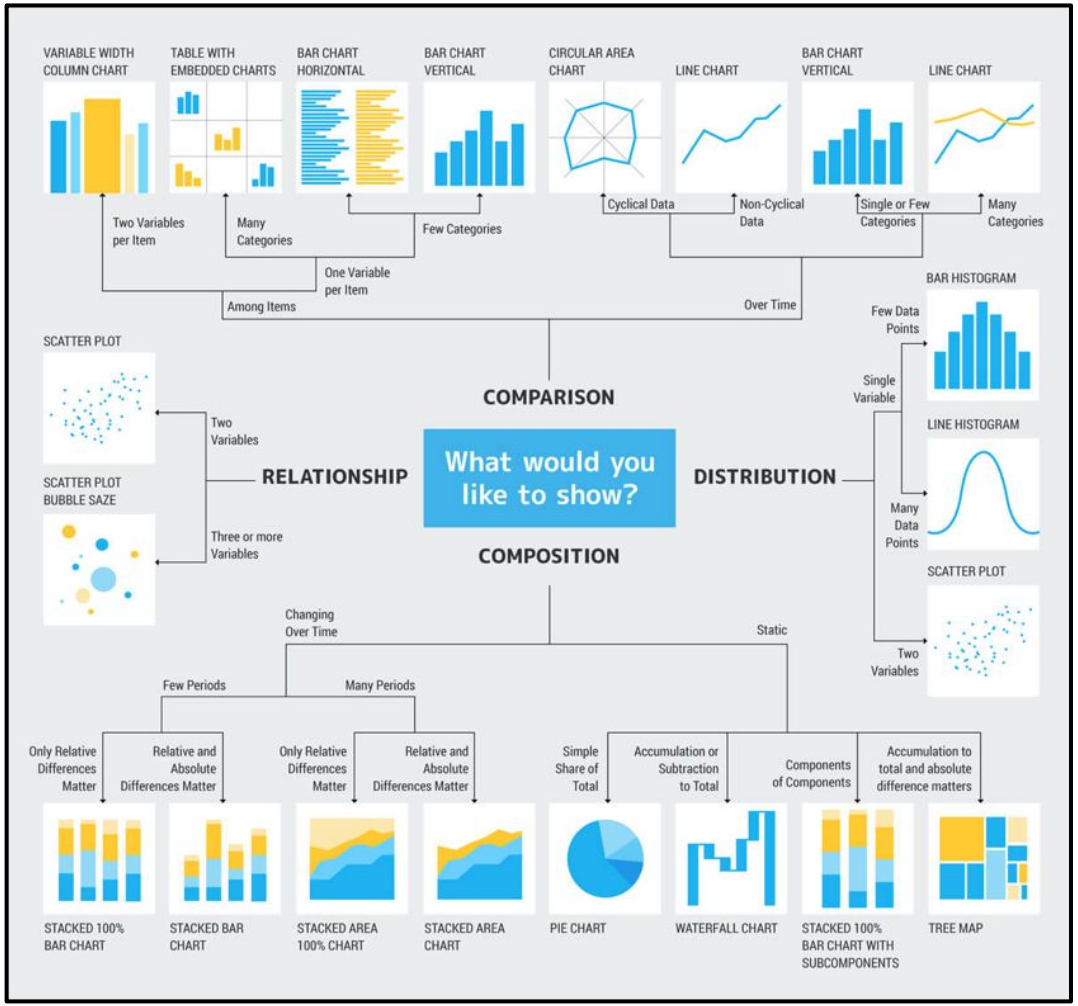

https://twooctobers.com/blog/8-data-storytelling-concepts-with-examples/

Think about what it is you want to show before creating your plot.

We'll look at two of the most common kinds of plots:

- **Bar Charts**
- **Line Charts**

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Python Plotting Libraries

Matplotlib:
https://matplotlib.org/stable/api/_as_gen/matplotlib.pyplot.plot.html

Seaborn:
https://seaborn.pydata.org/examples/index.html

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Bar Charts

This is a common visualization used for comparing groups or categories. The basic syntax for a barplot using matplotlib is:

```
import matplotlib.pyplot as plt

plt.bar(x = category, height = quantity field, data = dataframe)
```

You can also just use the pandas plot() method like this:

```
dataframe.plot(kind = 'bar', x = category, y = the quantity field);
```

Line charts

These plots are a common method for visualizing changes over time. Since pandas inherits plotting methods from matplotlib, we can just use pandas to create a line chart.

```
dataframe.plot(kind = 'line', x = date field, y= quantity field)
```

Let's walk through some examples in our plotting notebook.

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