Example I

TURBT Checklist:
Efforts to mitigate significant variations in bladder tumor recurrence rates have focused on improving documentation of operative findings using a surgical checklist. The intent is to enhance surgeon attention to important technical aspects of the procedure, ultimately resulting in higher quality transurethral resection of bladder tumor (TURBT). A longitudinal study was conducted to evaluate documentation before and after implementation of a established 10-item checklist for TURBT quality assessment in a community practice setting.

- Performance measure: count of elements (1–10)

- Measurements taken both before and after the checklist intervention (12/1/2017)

- Multiple operations per physician

- Goals
  - Compare pre- and post-intervention scores
  - Investigate the trend of post-intervention scores

Example II

PD Progression: Glucocerebrosidase (GBA) mutations are the most common identifiable genetic risk factors for Parkinsons Disease (PD). GBA encodes the lysosomal lipid hydrolase enzyme, glucocerebrosidase (GCase). Longitudinal data were collected to investigate how GCase activities change over time in PD patients and healthy controls, with or without mutations. Ultimately, the goal is to determine the role of GCase activity as a biomarker in idiopathic PD (IPD).

- GCase activity data are collected at BL, V04, V06, V08

- Demographics such as sex, PD status, mutation status are also collected

- Questions
    - Does GCase activities change over time in PD/Control?
    - Does the rate of change differ in different groups?