**Assignment 3 Implementation:**

**Tool used:** Tableau

**Design choice:**

I have created one visualization image which shows the disease progression for 40 patients. Patients who are suffering from TBI.

To elaborate on the co-ordinate system, I am using timeline as my X-axis which shows over a period of time, how many encounters have been occurred during the time frame. I am using mid-time period as the center. So, the relative time starts from -6k units to the +9k units.

For the Y-axis, I am using Patient ID (40 patients under consideration). Hence, there are 40 units in the Y-axis.

**Visualization:**

I have used color as the visualization parameter, where each encounter for each patient different color is used. This distinguishes each encounter.

The length of each color represents the difference in time between encounters for a patient.

Background color is made grey for the time frame for which encounter is not made.

**Observations:**

From the visualization we can make out that the number of encounters has been different in first half compared second half. For some patients, there are no encounters in the second half of the graph. That shows they are fully cured by that time. We can easily visualize from the graph that the patient has been recovered.

To speak about the frequency of encounters, from the graph it is evident that the frequency of encounters are more in second half. This can be visualized by the small color strips in the second half compared with the long-colored stripes.

Assignment3.twbx is the Tableau project attached which shows the visualization.