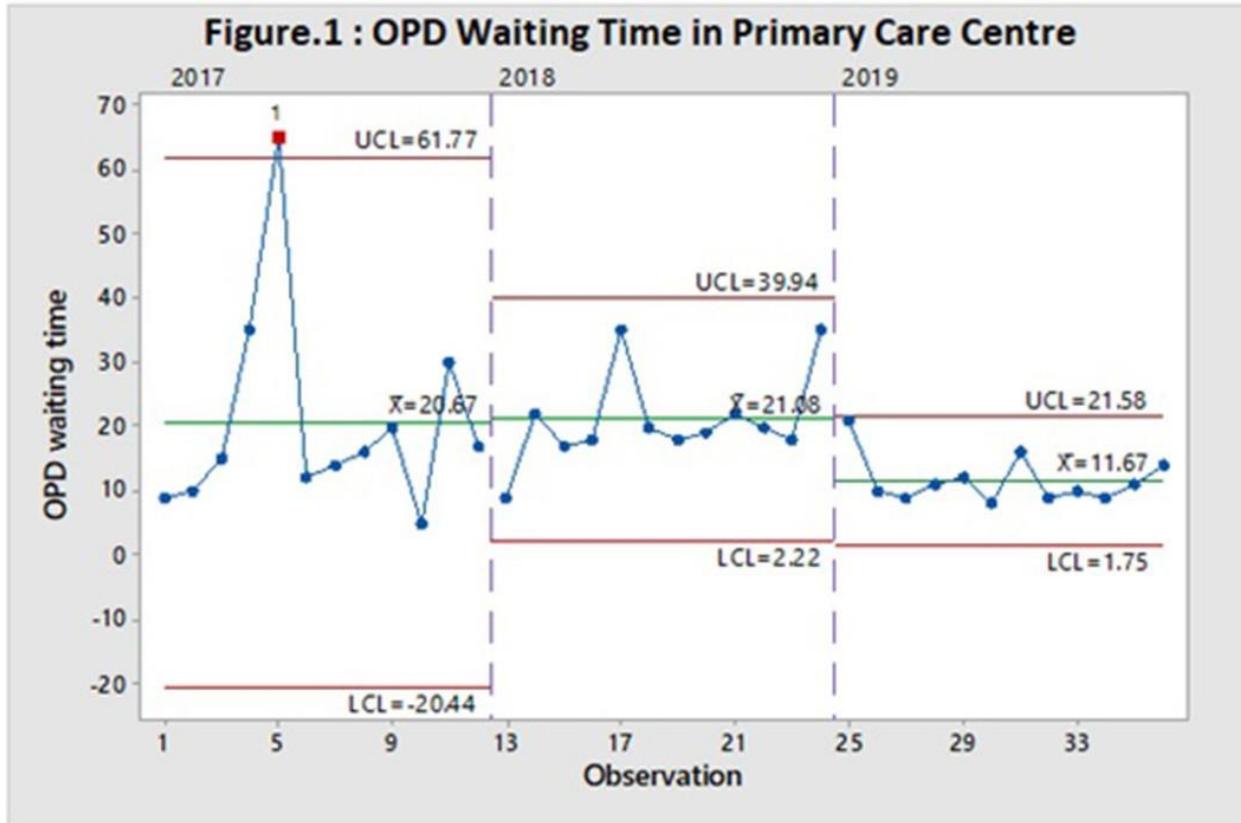


Manage Enemy of Quality for Process Excellence



System thinking is vital for quality improvement as most of the problems in healthcare arise due to system issues. Data collection and analysis are essential for system improvement in healthcare industry. The main purpose of data analysis is to measure the variation. W. Edwards Deming discovered that uncontrolled variation is the enemy of quality.

Despite of several tools and techniques available, control chart is the most powerful and crucial measurement tool for healthcare quality improvement. Level of variation can be measured with the help of control chart. In a control chart, assignable causes (special causes) and non-assignable causes (common cause) goes hand in hand. Non-assignable causes can be reduced as much as possible but can never be wiped out from the process. Furthermore, efforts to eliminate such random effects with performance improvement models are in vain.

Assignable causes in control chart repeated more than three times over a period of twelve months can be obliterated through performance improvement projects such as PDCA or Lean Six Sigma. Control charts can illustrate the variation measured and plotted over different years to get the whole picture of the process. The graphical representation shows the comparison of outpatient department waiting time over years in a primary healthcare center.

In the Year 2017, a special cause variation was identified during the month of June .A task force was formed to investigate the reason behind the unnatural pattern and adequate action was taken with concerned department to eliminate the system generated error. The OPD waiting time was scrutinized which became consistent in the year 2018 with reduced variation compared to year 2017. Moving on year 2019, the variation was reduced significantly with a difference of 9.41 minutes compared to average waiting time of year 2018.

Statistical Process Control is inevitable for business excellence and control chart is widely used by healthcare quality professionals for process excellence and improve quality and patient safety in healthcare. Control charts are used in healthcare industries to minimize the variation in their processes by identifying, reacting to and eliminating sources of variation as well as cost effective.