SSD Global Solutions

Leaner Six Sigma™ in Healthcare

Background

It is important to mention that most research will refer to Lean Six Sigma as opposed to our product, *Leaner* Six Sigma™. At Simple, Smart Decision-Making, Inc. we make Lean, Leaner.

Leaner Six Sigma™ practices are used to improve operations through a collaborative approach in which the focus is on increased flexibility, high quality, and elimination of waste (Improta et al. 2019). Owing to the complexity of its processes, the healthcare management system requires lean and agile practices to improve its response time and promote readiness among the staff in a highly unpredictable market. In healthcare, the most common and pressing issue is of efficient management of waiting lists and dealing with the patient no-show, which results in loss of time and resources for the healthcare facility. The *Leaner* Six Sigma™ approach can be used to mitigate the risk of waste by reducing patient absenteeism and making an effectual waiting list mechanism.

Challenges

Patient no-show and increased waiting times are the two most pressing issues in healthcare administration in the following areas: otolaryngology, emergency surgery, general orthopedics, infant neuropsychiatry, dermatology, and cardiology (Improta et al. 2019). The improvement in these processes is needed to promote fair access to healthcare services for the patients by focusing on parameters like waiting lists,

minimum and maximum waiting time, and steady time during which the entire queue is served by the staff (Pocha, 2010). Although appointment reservations is an efficient methodology to control the influx of patients efficiently, the no-show patients distort the process and result in an overall loss of productivity for the clinic.

Solution

No-show leads to unfair access to healthcare due to limited clinical capacity and hence, reduces the revenue and increases the cost of operations. To deal with this situation hospitals can implement an appointment overbooking approach using the *Leaner* Six Sigma™ methodology. The methodology will assist the healthcare facility in implementing other processes to increase its efficiency and response time. A summary of the proposed changes is outlined below:

- Predictive software simulation can help the facility to forecast the variations in patient arrival by factoring in the distance from the clinic, age, income level, and other factors that might affect their traveling decisions (Improta et al. 2019).
- The results of predictive software can be used to analyze the most probable variations and cancellations. This will allow the hospital to come up with a threshold for overbooking clinical services.
- Decreasing the visit duration of new patients after implementing an appointment-overbooking strategy can decrease the operational costs and enhance the clinical capacity.
- Online booking through mobile phones or computers can reduce the time spent by the staff on telephone bookings and attending cancellation calls (Pocha, 2010). Online confirmation messages to the patients can improve the prediction regarding their arrival in the facility on a particular date. Online booking can also

help in the reduction of the no-show rates, hence eliminating the root cause of the problem.

- Booking through online portals can reduce the burden on staff and can help them manage the influx of patient calls and visits efficiently.

Final Remarks

The application of *Leaner* Six Sigma™ for reducing the no-show rates can help the clinic to increase its efficiency by decreasing time wastage at various stages of operations i.e. from bookings to service. Booking overlapping appointments through online portals, while considering the predicted and most likely variations, can help the clinic to provide a better quality of care through better management of patient inflow.

Reference

Improta, G., Balato, G., Ricciardi, C., Russo, M. A., Santalucia, I., Triassi, M., & Cesarelli, M. (2019). Lean Six Sigma in healthcare. The TQM Journal.

Pocha, C. (2010). Lean Six Sigma in health care and the challenge of implementation of Six Sigma methodologies at a Veterans Affairs Medical Center. Quality Management in Healthcare, 19(4), 312-318.