You will assume that the hospital is operating 24 hours a day/ 7 days a week

1. How may In-patients enter the hospital in a week?

Ans. Since Inpatients enter the hospital through the InP-Triage we will calculate the inflow of patients via Inp-Triage. The number of servers InP Triage contains is one, and the numbers of Inp-Triage patients that enter per week is ~170,212. This means that on an average 2.5 mins a patient enters InP-triage.

1. How many In-patients were discharged in a week?

Ans. The number of people that are discharged from InP-Discharge are 88,892 per week. The Outflow of Inp-Patients differs vastly from the inflow which is Approximately 170,000 as 20% of them get sent to HcP-Triage. On average 2.13E4

1. How much time does an HCP patient spends at the hospital?

Ans. To calculate the time each HCP Patient spends individually in the Hospital we use the Indices “Throughput”, and after analyzing a sample size of 29803 and dividing it with an average of 0.0498 we get 5.98E5. The value received in Exponential form is the time each HCP patient spends.

1. How much time does an NCP patient spends at the hospital?

Ans. The total number of samples analyzed is 25600 and dividing it with the calculated average which is 0.0583 we get 439,108.06174957118353344768439108. The value received in Exponential form is the time each NCP patient spends.

1. What is the utilization of both the triage units?

Ans to calculate the Utilization of both triages we will use the Indices known as “utilization”. The Utilization ranges from 0 being idle to 1 being max. The max utilization in InP triage is 73 percent meanwhile in ICUY triage the max utilization is 24 percent.

1. How much time does an NCP spends waiting to be examined?

Ans. Considering there being an singe server in the station we get an average waiting time of 5.39E4(53,900) dividing that with the number of analyzed sample (75552) gives us the amount of time per InP-Patient which is approximately 0.72 minutes . The performance indecies used to calculate this was “queue time”.

1. How much time does an NCP spends before getting a tablet?

Ans. Since there are 20 servers the queue time for an InP-Patient is 0 which means that at the next station A bottleneck is created which increases the queue time significantly in the next station which is Max.8 at minutes nurse verify history. The performance indecies used to calculate this was “queue time”.

1. how many patients are on average waiting in the ICU triage unit?

Ans.The avg number of patients waiting in the ICU triage unit is 0.2990 minutes per patient and is efficient as both InP-Patients and HCpatients come to that . Considering a real-life situation ICU triages are for emergencies and need very less queue time.