

How a Canadian Hospital was able to analyze the time being spent in their waiting rooms and come up with solutions to decrease the waiting time for each patient.

“The average waiting time for patients dropped from 3.5 hours to 15 minutes”

- Results from Kaizen Simulation using UMT PLUS Data

Case Study: Using Time Study Software to decrease hospital waiting times

Problem

The hospital's facilities and resources had become clearly insufficient, with chronic overcrowding in the emergency ward reaching its peak during the winter.

Objective

Understand and conduct a complete review of the functioning of the emergency ward.

Methodology: Continuous improvement project. Kaizen.

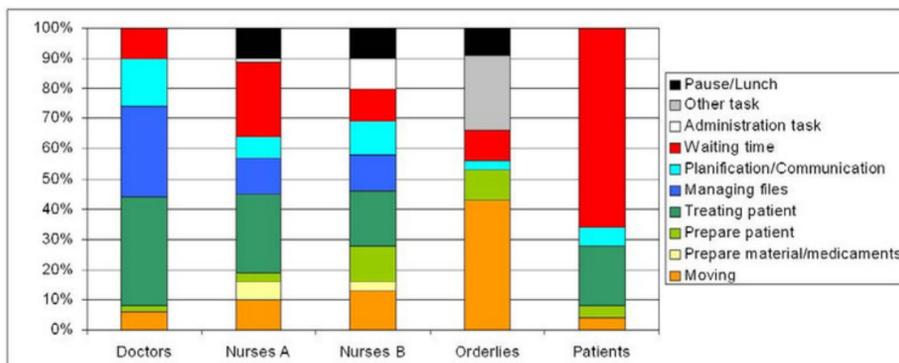
Measures

Using UMT Plus, a multidisciplinary team gathered data on patient movements as well as the various tasks performed by emergency personnel, including doctors, nurses, and orderlies.

The analysis of this data proved very interesting. For example, 60% of patients needed to see the emergency doctor twice. Patients were spending 66% of their time waiting. Meanwhile, emergency physicians were spending 36% of their time treating patients and another 30% managing files. Nurses spent between 18% and 25% of their time dealing with patients, while 43% of orderlies' time was spent moving about the facility.

It was found that on average, patients spent 3.5 hours in the emergency ward, with waits during peak times increasing to between 13 and 18 hours.

Another interesting note: patients arriving at the emergency ward by ambulance monopolized an average of 2.7 hours of the emergency physician's time.



SIMULATION 1

Using this data, a simulation was carried out to reproduce the functioning of the hospital's emergency ward. Upon completion, the simulation proved to be identical to reality, which confirmed the validity of the various measures used.

SIMULATION 2

The simulation allowed the Kaizen team to evaluate the impact that changing two parameters would have on patients:

1) Reduce the necessity for patients to see the doctor twice from 60% to 40% by establishing protocols.

2) For the approximate 100 patients arriving each year by ambulance, the emergency physician is responsible for the first hour of treatment. Following this, an on-call team takes over.



RESULTS

The results of the second simulation were surprising. The average waiting time for patients dropped from 3.5 hours to 15 minutes.

