Jersey Shore Hospital Centralized Scheduling

Overview
Jersey Shore Hospital implemented a new electronic health record system, Meditech, in July 2012 which includes a community wide scheduling module (CWS). The hospital is currently utilizing the CWS module independently in each department which includes staffing approximately 6 schedulers across 5 different departments including Radiology, Cardiopulmonary, Rehabilitation, Surgery, and Clinics. Utilizing Meditech, Jersey Shore Hospital wants to implement a centralized scheduling department with personnel capable of scheduling patient appointments across all departments within the hospital.

Objectives
- Design the staffing needs for a centralized patient appointment scheduling department
- Determine implementation order for department to be incorporated into CWS
- Determine functions to be retained in each parent department
- Provide list of equipment needs necessary to run an effective scheduling department
- Analyze cost and time savings of implementing the CWS department

Approach
- Observed the current scheduling process and determined which characteristics of the call to measure
- Performed multiple work sampling analyses of scheduling staff and imported data into Microsoft Excel
- Calculated the arrival rates, processing time distribution, and call duration from data set
- Designed a simulation model of Jersey Shore Hospital scheduling process using calculated metrics
- Verified and Validated the simulation model followed the real world problem
- Ran different variations of scheduling staff in order to effectively accommodate call volumes
- Performed a sensitivity analysis in order to determine performance under standard conditions
- Through analyzing the results, 2 full time and 2 part time scheduling staff is ideal

Outcomes
- 2 full time and 2 part time schedulers can efficiently process the entire call volume
- Jersey Shore Hospital will save technicians 8 hours per week as a result of this project
- Experience an increase in patient care
- Call processing times were reduced by more than two minutes from current system