Process Improvement in a Health Care Facility:
The role of an IE

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Abstract

Recently, health care topics become an interesting research topic among the researchers, due to the issues with the current health systems, which are generally old, as well as the assigned funds for health care improvement by several organizations. While the technical aspects are developed by different engineering skills, the Industrial Engineers are involved in process improvements of the health care facilities. The improvements may be defined to reduce wait time in the facility, costs and expenditures, or increasing profit, service level, turn over time, etc. While the concepts that IEs use for process improvement are usually common skills, there are some neat differences, due to the special environment that these techniques are applied.

In this presentation, we try to bring a big-picture of managing a health care facility, and in specific, the Peri-OP department. The Peri-Op department includes Operating Rooms (OR’s) which are the income engine of a hospital, Pre-Op department (where patients get ready to enter ORs), Post Anesthesia Care Unit (PACU), where patients are sent after a surgery. We also introduce the Sterile Process Department (SPD) where the surgical tools and instruments are washed and sterilized, to be used for oncoming surgeries. We then discuss current practices in a specific hospital (GHS) and address potential improvements for each department. We are seeking to introduce several research topics and fields in the area of healthcare improvement.

Biography

Ali Bozorgi has received his MSc and PhD from the Department of Industrial Engineering and Management Science at the University of Central Florida, and was with the Clemson University as a Post-Doctoral Fellow for a year. He received his BSc in industrial engineering from Sharif University of Technology. His primary research interests include Supply Chain Management, Health Care Improvement, Simulation Modeling, and applied Operations Research. In particular, he has been active in healthcare simulation-optimization, cold supply chain, and OR block release time optimization.