



Project I Description

Project Name: Leaning the supply chain of patient healthcare at UMC-RH
Sponsor: UMC Rizk Hospital

Project Overview

In previous years, students have designed and optimized operations of different departments at UMC-RH such as the radiology department, the laboratory, the admissions department, and the emergency department. In these projects the focus was on leaning and optimizing these individual functions/departments. This is the first step in achieving supply chain excellence. Overall organizational/system effectiveness was not emphasized however.

This project entails considering these departments integrated to form a supply chain. Students are expected to build on the knowledge gained in the previous FYPs in building the supply chain and making the links visible to all in the chain.

The final design should optimize the supply chain as much as possible with a focus on system efficiency and effectiveness.

More specifically students are asked to

- model the existing supply chain using analytical tools or simulation
- investigate ways to optimize it by applying industrial engineering concepts and tools.
- design a system that optimizes patient and information flow

Project Areas

- | | |
|---|--|
| <ul style="list-style-type: none">• Optimization• Supply chain | <ul style="list-style-type: none">• Lean manufacturing |
|---|--|

Project Deliverables

- Survey of best practices and standards and new technology available for visibility and collaboration across the supply chain
- Investigated system design solutions and justification for the proposed one
- A report emphasizing the economical, and sustainability aspects of the proposed solution and highlighting the risks associated with implementation of the proposed design.

Team Size and Majors needed

INE 5 students