



SUCCESS STORY



This study of a proposed department redesign was performed in FlexSim Healthcare. A comparison of models for both the current and future state of the department showed a significant reduction in labor costs, and the real life implementation has worked better than expected.

VALIDATING A PROPOSED DEPARTMENT REDESIGN

The General Stores department at St. Dominic's Memorial Hospital is where supplies are received, broken down and stored, and then picked for delivery where they are needed. The department was getting the job done, but the receiving area within General Stores was too small to hold all incoming pallets, so pallets were placed in the hallway until space became available in the warehouse. St. Dominic's conducted a simulation study using FlexSim Healthcare to validate a proof-of-concept for the department redesign.



CLIENT
ST. DOMINIC'S

LOCATION
Jackson, MS

TYPE
Healthcare Organization

WEB SITE
www.stdom.com

ISSUES TO SOLVE

The lack of space in the receiving area created several problems. Congestion in the hallway reduced travel to one direction while pallets were present, which in turn reduced the main aisle in General Stores to a one-way path. In addition, employees had to handle the same pallet multiple times to complete the receiving process. The proposed redesign sought to fix these problems by moving the location of receiving and adding enough space to hold all incoming deliveries.

Two models were developed in FlexSim Healthcare – one for the current state and one for the proposed future state. All process times from the current state model were imported into the future state model; it was assumed that travel distance and path congestion would be the only differences in the process. The models were compared in a single trial using the same random number streams to ensure accuracy.

FlexSim Healthcare transformed this project from a question (“Will this really work?”) into a reality.

JUSTIN HUFF
INDUSTRIAL ENGINEER, ST. DOMINIC'S

PROJECT SAVINGS BY THE NUMBERS

750 LABOR HOURS
SAVED ANNUALLY

\$12,753 SAVINGS PER YEAR IN LABOR COSTS

 AN ADDITIONAL
22 FEET SHELVING SPACE

675 SQ. FEET
EXTRA SPACE

RESULT

The simulation study revealed that, under the current state, six employees would complete their work in 6.55 hours. This same work was shown to take just 6.05 hours under the proposed redesign. Taking into account the average wages and benefits for employees in the department, this daily reduction of 3 labor hours would result in **annual savings of \$12,753**. This figure doesn't include the additional, unquantified labor savings due to increased efficiency in stocking, not to mention the **creation of more than 675 square-feet of shelving and empty space**.

This simulation project required **just two days of modeling**. The redesign of General Stores was accepted and implemented, and is working even better than expected.