

## 1 Introduction

A leading global healthcare technology company, dedicated to developing solutions to reduce pain and restore health, is adept at solving the most challenging health problems that face humanity with innovations to transform lives. They strive for reliability in their products and are recognized as a dedicated company led by honesty and integrity. When rapid growth threatened their ability to meet customer obligations, they sought assistance.

## 2 The Challenge

The healthcare company experienced exponential growth in its inventory-holding units, creating significant challenges in space utilization. These issues were further exacerbated by improperly allocated or sized locations within the 1.4 million-square-foot warehouse, resulting in inefficiencies and increased labor costs. The company contracted Alpine Supply Chain Solutions to help with four main challenges:

- The need to combine 4 small warehouses into one existing warehouse
- Poor space utilization
- Increased transportation costs
- Increased labor costs

## 3 The Solution

Alpine Supply Chain Solutions began by conducting a thorough data analysis followed by identifying the optimal ways of storing products within the warehouse. Alpine followed these three steps to develop the optimal solution:

- Storage Type Analysis to identify SKUs and inventory to be stored in the existing goods-to-person storage system to reduce replenishment frequency.
- Storage Type Analysis to identify optimal rack sizing and counts and determine what modifications will as well as what modifications would improve space and productivity.
- Identifying SKUs and inventory to be moved off-site. Travel between offsite storage and the main warehouse was considered as a primary target to reduce overall transportation costs.

## 4 The Outcome

Alpine's approach to optimizing space utilization showcases how strategic planning and thoughtful design can drive significant operational efficiency, reduce labor costs, and maximize warehouse capacity. With Alpine's guidance, the healthcare company achieved its goal of combining four warehouses into a single one, and:

- Improved overall space utilization within racking by
  9.5%
- Reduced labor costs by \$175,000 per year with optimized pallet sizing and allocation
- Reduced transportation costs between the warehouse and outside storage by 45%

