

AlloSource Tissue Storage Optimization

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Abstract: AlloSource, a nonprofit bone and tissue bank in Centennial, Colorado, offers more than 200 types of bone and tissue grafts for life-saving and life-enhancing medical procedures. Any opportunity to improve their operations comes with the immediate impact of saving lives. The current process for placing these grafts into their storage freezers consists of visually inspecting them for available space, which leads to inaccuracy and inefficiency. We address this problem by first developing a tool which tracks organization and utilization of freezers, and then incorporating a product storage algorithm that minimizes wasted freezer space and maximizes employee productivity. We demonstrate that our tool allows AlloSource to improve inventory control accuracy by eliminating the need to inspect freezers during product placement.

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