Descending the Apex of the Slippery Slope of Kit Management

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Goals

• To create a snapshot of the current inventory in two department disease centers (DC) and provide a method of action to manage kit supply using the Slope.io inventory management application.
• To implement the full department and reallocate space as needed.

Background

Clinical trial sponsors deliver supplies based on contracts with the central labs, which often end up as excess trial materials. Automatic resupply from sponsor triggers an apex of trial materials that can quickly become overwhelming for site staff to sustain in a reasonable amount.

Two disease centers were selected for a pilot study of Slope.io for inventory management at UPMC HCC CRS.
• Disease Center 1 (DC1)
  • Large and high accruing Phase I center
  • Opens and closes studies quickly.
• Disease Center 2 (DC2)
  • Long established within the department.
  • Opens trials and accrues on a routine and predictable basis.

The department was divided into zones and the cabinets and shelving were labeled accordingly. The CRS Lab (Neutral party) staff members approached each DC by asking for the known location of the kits. Lab staff logged the items in an “as is” state to determine a snapshot of the center and then completed a walkthrough of the department to locate additional supplies. The lab identified supplies unknown to the DC, for which they tracked separately. Once all the known DC supplies were imported, an item report was generated from Slope. The unknown supply locations and the Slope item report were compiled in Excel and color coded: green (DC known, not expired), yellow (DC known, expired), and grey (DC unknown, mixed). DC Staff were given the task of disposing 5 kits per day in the yellow area and 2 hours per week in the gray areas to either dispose or inventory within Slope.

Solutions and Methods

Space Allocation Across Disease Centers

Baseline

3 Months Post Implementation

5 Months Post Implementation (Current)

DC1 Implementation:
• 32% of allocated space utilized appropriately.
• 68% of items either expired or unaccounted for.
• Total amount of known usable items was 2134.
• 760 (26%) items were expired on site and occupying space.
• 43% of kit supply items were on site but unaccounted for.

DC2 Implementation:
• 53% of allocated space utilized appropriately
• 3% of items expired or unaccounted for.
• Total amount of usable items known being 1249.

At five months post implementation, DC1 had nearly all inventory accounted for and DC2 was fully up to date. Departmental space was able to be more efficiently distributed due to the use of Slope.

Data

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Future Outcomes

Automatic resupply from sponsor triggers an apex of trial materials that can quickly become overwhelming. The attack position to reach the berm of oversupply requires a multiphase approach.
• DC1 disposed of 1901 kits in 3 months.
• DC2 increased allocated space to 96%.
• Unused space was given to a disease center in need based on trial volume.
• Department inventoried for full picture (17,102 known trial supplies, 44% of space unusable).
The Slope inventory system created a snapshot of the excess within the department and allowed us to target an approach to manage the oversupply across departmental DCs and proved sustainability over time.