

Building a Clinical Research Unit Utilization Tool

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1. Background

Moffitt Cancer Center has two out-patient Clinical Research Units (CRU). These units support phase I-III interventional therapeutic clinical trials across all oncology disease sites. With the increasing complexity in the requirements in oncology clinical trials, combined with the increasing number of accruals to clinical trials there was an observation by the team that the units were above capacity during peak hours on certain days of the week. The Clinical Trials Office (CTO) partnered with our Process Excellence Department to review ways to track and show this observation to upper leadership.

2. Goals

We sought to design a tool that could be utilized by cross-functional operational leaders to explore the utilization of the Clinical Research Unit across both locations at Moffitt Cancer. The tool will allow operational leaders to measure the utilization of the units to describe the resources needed to maintain the infusion needs of the clinical trials conducted at the center.

3. Solutions and Methods

- (1) Focus groups were conducted to determine what measures were important to use to describe the utilization of the units. Key areas to measure were identified as appointment duration and utilization.
- (2) Determination of source data from Cerner Platform to feed into Analytics Explorer.
- (3) Development of visualization of the metrics, key assumptions, and constraints.
- (4) Education and monthly metric reporting to Clinical Trials Operational leaders.

4. Outcomes

- (1) The tool showed that on average 60 percent of patients are treated on the same day as they are seen by their provider with an average scheduled chair time of 3 hrs.
- (2) Usage patterns showed that the peak hours of utilization in the middle of the day, with lowest usage day being Friday.
- (3) Expansion of CRU evening hours, including development of orders for study teams to use to communicate when patients or studies qualify for these hours.
- (4) Development of a transition area for observation or serial research lab draws.
- (5) Shifting of studies to CRU location with treatment availability.

5. Lessons Learned and Future Directions

Lessons Learned

- (1) Operational reality should be considered when developing metrics to describe utilization.
- (2) There are many immovable characteristics of research which contribute to differing abilities to level load a CRU vs infusion center.

Future Directions

Category: Resource Management and Finance – Work in progress

- (1) Review opportunities to ensure clinical trial protocols that our investigators are involved with are written in a way that support decoupling of visits as well as reviewing protocols to ensure we are optimizing the patient scheduling approach to meet the needs of protocol and patient.
- (2) Incorporate more refined methods for determining what the optimal target utilization for a clinical research unit should be, including development of benchmarks with other cancer centers.
- (3) Develop weekly reports to CTO disease-based teams so they can view utilization and plan for decoupling of visits and can see when availability in the unit exists.