Category: Resource Management and Finance – Completed project

Mastering Lab Talk: A Symphony of Science and Communication

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1. Background

Clinical trials are increasing in complexity regarding clinical trial correlatives, which require several teams to be engaged in the study and assist with data generation. For all teams to move towards collection of these integral trial endpoints, communication processes amongst groups are imperative. Rapid trial implementation and portfolio expansion also require consistent communication amongst the groups and a process that will hold as subject accruals increase. This project is a review of the correlative communication process at UPMC Hillman Cancer Center between the various Clinical Research Services (CRS) disease centers and lab.

2. Goals

The goal was to create a streamlined alert process from 12 disease center groups to alert the CRS laboratory of incoming patients with correlative processing that will remain effective and consistent with increasing patient sample volumes.

3. Solutions and Methods

A weekly lab alert template Excel sheet was created to streamline the study requirements and expected patients. A process document was distributed to staff and training is routinely conducted on the process. Staff are required to enter patient and coordinator information, protocol, cycle, date, location of draw in the clinic, expected start time, and furthest post dose on the list. The lab list encompasses blood, tissue biopsies, bone marrow collections, and sample batch shipment requests. Each disease center submits the list each Thursday for the upcoming week. Any updates after the initial submission must be communicated in writing through an updated lab list alert to the lab team. The lab staff schedules are fluid and based upon the list process to accommodate all expected samples and provide coverage for late specimens. Batch shipments are aggregated based on priority of request and placed into a revolving queue. All patients are aggregated onto a De-identified Lab Patient Calendar. As samples are received, they are crossed off the calendar. Sample status is reviewed with staff to determine any misses or errors in collection, or to allow for potential resolution of delays.

4. Outcomes

Implementation of the written lab list increased lab staff awareness of patient samples and allows for effective triage in sample processing. A decrease in missed samples was seen over time. A second shift staff member was added to account for the subjects who had late samples as seen trending on the lab list. Lab staff schedules were repositioned to account for sample processing and preferred staff availability. Batch shipments can be processed with sufficient dry ice on site and sent within a timely fashion. Sample processing has increased 135 percent since implementation of lab list processes and has remained effective over exponential patient accrual growth.

5. Lessons Learned and Future Directions

The lab list process is evolving over time to become all-encompassing for clinical trial collections. Weekly list reminders are required, and training is completed for all new staff. Annual training is conducted for all staff, as needed. The process has proven effective to maintain adequate staffing for quality sample

processing and has recently been expanded to include subsequent processing labs, EKG collections, and the pharmacy teams.

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