Case Study: Dana-Farber Cancer Institute



Dana-Farber Cancer Institute Implements Eceptionist to Improve Lab Efficiency

Dana-Farber Cancer Institute, located in Boston, Massachusetts, is internationally known for its research and clinical excellence. A comprehensive cancer treatment and research center, Dana-Farber is one of the world's leading centers of cancer research and treatment.

Dana-Farber's Connell and O'Reilly Families Cell Manipulation Core Facility (CMCF) uses the Eceptionist scheduling and referral software to manage the request and scheduling of cell-based therapies and cell processing for patients enrolled in clinical research protocols. CMCF manage upwards of 100 protocols and clinical trials at any given time. Each protocol has a unique workflow and requires a complex scheduling process for resources, technicians and equipment.



CHALLENGE

Prior to implementing Eceptionist, CMCF coordinated scheduling requests through email requests and various manual methods. Neither the groups requesting services, nor the lab managers had broad views into lab availability and capacity. There was a sense of imbalance in how resources were being utilized but no data to validate that notion. Persistent last minute requests and schedule changes let reserved slots go unused and created bottlenecks. Frustration with the scheduling process persisted. To implement a more automated scheduling process, CMCF reviewed the market of scheduling solutions and issued an RFP. Their approach to vendor selection required:

- 1. A best in class scheduling software capable of handling complicated scheduling algorithms and complex workflows.
- 2. A vendor with demonstrated ability to deliver innovation in software development.

SOLUTION

CMCF went live with Eceptionist's Enterprise Schedule and Triage & E-Referral modules in November 2017 after a five-month implementation. The software is configured to meet the unique needs of cellular therapy including customized calendars, outputs of lab processing time and the automated production of infusion schedules.

More specifically, CMCF uses Eceptionist's existing functionality to:

- Schedule multiple linked procedures in just a few clicks by building the manufacturing processes (i.e. protocols and trials) as a series of appointments.
- Manage capacity using the clinic functionality which controls for room, equipment and technician availability.
- Manage and distribute their weekly calendar. The Weekly Calendar also calculates processing time by requesting group and can be filtered into multiple views and color blocks of time.



Solution Continued

- Provide access to internal groups and partner hospitals to enter patient service requests directly into Eceptionist.

 Business rules manage the request workflow allowing some groups to book directly into lab calendars under certain circumstances. Dana-Farber can update the business rules without vendor intervention.
- Manage the workload of technicians and lab managers with queues and lists that allow users to easily see what's in the pipeline.
- Triage requests for patient services through defined workflows configured to route simple and complex processes down different pathways.
- Provide visibility to the status of all procedures being processed in the lab at any given time. Request and appointment statuses such as Pending, Confirmed, In Process, Product Not Collected are all viewable from a queue that can be filtered and sorted according to user preference.
- Maintain data integrity and streamline communication between the lab and inpatient departments with HL7 integration between the Eceptionist application and the EMR system. Patient demographic, admit and transfer data is received into Eceptionist to reduce manual entry and support the lab's ability to produce accurate infusion product schedules.

RESULTS

CMCF quickly experienced efficiencies after implementing Eceptionist. Communication between the clinical departments and lab improved along with overall satisfaction with the scheduling process. Within just four months of go-live, the following results were realized:

- 90% of all procedures are directly scheduled without the intervention of laboratory management.
- Lab is running at greater capacity as scheduling engine is identifying previously underutilized processing slots.
- Increased efficiencies have produced an increase in the volume of patients and products coming through the lab thus increasing revenue.
- Clinical end users are more responsive to patient availability now that they can schedule directly.
- Lab managers who previously functioned as the internal scheduling team have fewer scheduling demands and more time to focus on real lab work.



