

NK9EOb – INNOVATION

REDESIGNING THE WORKFLOW TO IMPROVE PATIENT EXPERIENCE

Using the required empirical outcomes (EO) presentation format, provide one example of an improved outcome associated with clinical nurse involvement with the design or redesign of workflow.

Problem

On August 1, 2022, NewYork-Presbyterian/Columbia University Irving Medical Center (NYP/Columbia) moved its Therapeutic Infusion (606117) [Therapeutic Infusion] Unit from the 14th floor of the NYP/Columbia Herbert Irving Pavilion (HIP14) to the 4th floor of the NYP/Columbia Presbyterian Hospital Building (PH4). The goal of the move was to designate separate locations for oncologic and non-oncologic therapeutic infusions. Immediately after the move, the Therapeutic Infusion Unit clinical nurses noted significant treatment delays due to prolonged medication delivery times by the pharmacy.

At the time, the pharmacy mixed medications that were not regularly stocked after the patient registered and delivered them to the unit at set timeframes. However, patients arriving early who registered outside the set delivery timeframe had to wait until the next scheduled delivery for mixed medications not regularly stocked. This delay negatively impacted the patients' experience and perceived wait times.

Pre-Intervention

August 2022:

- The Therapeutic Infusion Unit mean score on the Q-Reviews patient satisfaction survey question, "How well were you kept informed of any delays?" (informed of delays) was 4.41 in August 2022.

- Diane Trois, BSN, RN; Abigail Mallillin, BSN, RN; and Michele Gonsalves Carvalho, BSN, RN, OCN, MEDSURG-BC, charge nurses (clinical nurses), Therapeutic Infusion Unit, reported concerns related to medication delays to Justin Ngai, MSN, RN-BC, NE-BC, Operations Manager, Adult Infusion Centers. Mr. Ngai escalated the treatment delays to Alicia Algeo, MPS, BS, Administrative Director, Operations, who recommended pursuing a collaborative solution with Pharmacy.
- Mr. Ngai spoke with Faisal Sultan, PharmD, Operations Manager, Pharmacy, NYP/Columbia. Dr. Sultan attributed the delays to the physical distance of the pharmacy to the Therapeutic Infusion Unit, Pharmacy staffing issues impacting timely delivery of medications, and delayed preparation of medications.
- Mr. Ngai, Ms. Trois, Ms. Mallillin, and Ms. Carvalho conducted a literature search to identify best practices. The studies showed that a pre-emptive appointment reminder for patients improved timely appointment compliance and workflow efficiency.
- Mr. Ngai, Ms. Trois, Ms. Mallillin, Ms. Carvalho, and Dr. Sultan worked together to map out the current workflow for medication delivery to identify areas of opportunity. Based on the current state, they redesigned their workflow to mitigate the delays by establishing triggers for early delivery and preparation of medications. The new workflow entailed:
 - One day prior to the scheduled appointment, the charge nurse called patients who were scheduled for early morning treatments before 10:00 am to confirm their appointments.
 - The confirmation allowed pharmacy to preemptively prepare and schedule delivery of the medications for the next day's treatment.
 - If the patient confirmed the appointment and the medication orders did not include costly medications that required IV access, including Ocrevus[®], Entivyo[®], enzymes, Saphnelo[®], or Remicade[®], then the charge nurse checked the patient in and released the treatment orders at 6:00 pm through a designated secure chat within Epic, NYP's electronic health record.
 - Pharmacy then was able to prepare the medications early in the morning prior to the patient's appointment time. Clinical nurses in the Therapeutic Infusion Unit picked up the medications on HIP14 at 7:30 am in anticipation of the 8:00 am patient appointment, rather than having medications delivered by the pharmacy.

Goal Statement

To increase the mean score on the Q-Reviews patient satisfaction survey question, “informed of delays,” on the Therapeutic Infusion Unit

Participants

Name/Credentials	Discipline	Title	Department/Unit
Justin Ngai, MSN, RN-BC, NE-BC	Nursing	Operations Manager	Adult Infusion Centers
Diane Trois, BSN, RN	Nursing	Clinical Nurse	Therapeutic Infusion Unit
Abigail Mallillin, BSN, RN	Nursing	Clinical Nurse	Therapeutic Infusion Unit
Michele Gonsalves Carvalho, BSN, RN, OCN, MEDSURG-BC	Nursing	Clinical Nurse	Therapeutic Infusion Unit
Alicia Algeo, MPS, BS	Operations	Administrative Director	Operations
Faisal Sultan, PharmD, MBA	Pharmacy	Operations Manager	Pharmacy

Intervention

September 2022:

- Mr. Ngai, Ms. Trois, Ms. Mallillin, and Ms. Carvalho educated the Therapeutic Infusion Unit clinical nurses on the new workflow and steps including how to review the patient’s treatment plans and update the appointment note to confirm patient appointments. Mr. Ngai and Dr. Sultan educated the Pharmacy team on running a report based on the confirmation.

Impact Statement: Through the implementation of enhanced communication between Pharmacy and nursing, clinical nurses successfully managed to both mitigate and communicate any delays to patients. Consequently, this contributed to an increase in the mean score on the Q-Reviews patient satisfaction survey question, “informed of delays.”

- Mr. Ngai communicated the redesigned workflow to the Therapeutic Infusion Unit team via daily huddles.

Impact Statement: Communicating the redesigned workflow to the team improved compliance and the clinical nurses’ ability to mitigate and communicate delays to patients, thereby increasing the mean score on the Q-Reviews patient satisfaction survey question, “informed of delays.”

- The clinical nurses on the Therapeutic Infusion Unit and the pharmacy team implemented the redesigned workflow on September 21, 2022.

○ **Key references:**

Chu, H., Westbrook, R. A., Njue-Marendes, S., et al. (2019). The psychology of the wait time experience – what clinics can do to manage the waiting experience for patients: a longitudinal, qualitative study. *BMC Health Services Research*, 19, 459. <https://doi.org/10.1186/s12913-019-4301-0>

Set, K., Bailey, J., Kumar, G. (2022). Reduction of No-Show Rate for New Patients in a Pediatric Neurology Clinic. *The Joint Commission Journal On Quality and Patient Safety*, 48(12), 674-681. <https://doi.org/10.1016/j.icjq.2022.09.001>

Outcome

