YaleNewHaven**Health**
Smilow Cancer Hospital

Breaking Boundaries: Enhancing Infusion Chair Utilization in Phase I Research

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Yale CANCER CENTER
A Comprehensive Cancer Center Designated by the National Cancer Institute

Goals

Improve infusion chair availability by reducing the time a chair is utilized beyond drug administration.

Determine if expansion to additional infusion units is warranted.

Background

- New global cancer cases are increasing, threatening to overwhelm cancer center resources, including infusion chairs.
- Clinical trial complexity has increased across all phases, notably in phase I studies.
- Research assessments often extend beyond the administration of drug, requiring the infusion chair be utilized for the entire patient visit.
- With the increasing demand for infusion chair scheduling, the Yale Cancer Center Phase I Clinical Research Unit (YCC PICRU) was targeted as the location for a novel pilot workflow to optimize infusion chair utilization.

Solutions and Methods

Respite Care Chair Creation

- ❑ Dedicated space within the YCC PICRU was identified and reserved for the Respite Care Chair (RCC).
- ❑ A scheduling template was created in Epic for the RCC.

Patient Assessment

- ❑ Patients with post-dose assessments such as research lab draws or ECGs were identified for the RCC consideration.
- ❑ Patients receiving oral drug were also considered for the RCC.
- ❑ Patients deemed high risk for acute toxicity (e.g., CRS) were excluded from the RCC.

Scheduling

- ❑ Patients were scheduled in their infusion chair for the length of drug administration and then scheduled in the RCC for remaining post dose assessments.
- ❑ Appointments (including RCC) were reflected in MyChart allowing patient to see full length of visit

Outcomes

- **32 patients were scheduled into the RCC from May to November 2024.**
- Initial feedback was promising with one nurse stating:

> **"Optimizing infusion chair utilization in phase 1 ensured that every patient receives timely efficient care, reducing wait times and improving overall treatment access."**

- Approximately **59 infusion chair hours were recovered** by utilizing the RCC during this pilot period.

Lessons Learned and Future Directions

- Expansion plans, including renovation to existing hospital space, were initiated following the preliminary success of the pilot.
- Hospital and research leadership are currently designing a research-only observation unit within the PICRU to allow multiple concurrent patients to receive post-dose research assessments outside of their infusion chair.
- Additional applicability in standard infusion clinics should be considered where feasible to fully optimize infusion chair utilization.

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