Measuring the Impact of a Referral-Based Prescreening Workflow on Treatment Trial Accrual - A Retrospective Data Analysis

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1. Background
Patient recruitment is vital for the success of oncology clinical trials and remains a challenge, particularly with limited research staffing and evolving work environments. The Phase 1 and Thoracic Disease Management Groups (DMGs) at Perlmutter Cancer Center at NYU Langone implemented a referral-based prescreening workflow to address this challenge. This initiative aimed to enhance efficiency by having physicians communicate trial preferences to dedicated pre-screeners who reviewed patient records for preliminary eligibility before initiating patient contact. To evaluate the effectiveness of this workflow, the Clinical Trials Office (CTO) conducted a comprehensive review of referral data.

2. Goals
Our goal was to assess the referral-based prescreening workflow's effectiveness in facilitating patient enrollment in oncology treatment trials. We aimed to analyze enrollment, evaluate process efficiency, and identify trial portfolio gaps, seeking insights into the workflow's impact on trial accrual and patient care pathways.

3. Solutions and Methods
We conducted a retrospective review of data from July 2022 to January 2024, extracting information from institutional trackers documenting the referral process to screen failure or study enrollment. Data points extracted included date of referral notification, consent acquisition, initiation of treatment, and reason for screen failure, if applicable. Accrual data from 2019, 2022, and 2023 were reviewed to assess the workflow's impact on trial accrual rates, excluding 2020 and 2021 due to COVID-19 disruptions.

4. Outcomes
From 2022 to 2024, the Thoracic DMG received 230 referrals, with 44.78 percent consenting and 34.35 percent accruing to a trial. The Phase 1 DMG received 553 referrals, with 28.5 percent consenting and 23 percent accruing. Following workflow implementation, the Phase 1 DMG accrued 78 subjects in 2022 and 107 in 2023, while the Thoracic team accrued 103 patients in both years, compared to 67 and 49 in 2019, respectively, prior to implementation.

In Phase 1, the median time from referral notification to consent increased from 10 days (July 2022 - December 2022) to 18 days in 2023. Similarly, the median time from consent to trial start rose from 14 to 22 days during this period. In 2019, the average time from consent to trial start was 23 days.

Thoracic data showed an average of 23, 11, and 6 days between referral notification and consent in 2022, 2023, and 2024, respectively. The average time between consent to trial start was 17, 19, and 12 days during the same period. In 2019, the average time between consent and trial start was 19 days.

Consented patients did not proceed to trial for various reasons, including opting for standard of care treatment, failing to meet inclusion criteria, or finding alternative trial options elsewhere.

5. Lessons Learned and Future Directions

The prescreening workflow correlated with increased treatment accruals and reduced time between consent and treatment start. This efficiency is crucial given limited staff resources and trial slot availability. Despite slight increases in consent and accrual times, the workflow improved overall patient navigation compared to 2019. We propose diversifying our Phase 1 portfolio, advocating for fair slot distribution, and streamlining referrals to reduce delays in patient access to novel treatments. Having dedicated pre-screeners for each DMG may further improve treatment trial accruals.
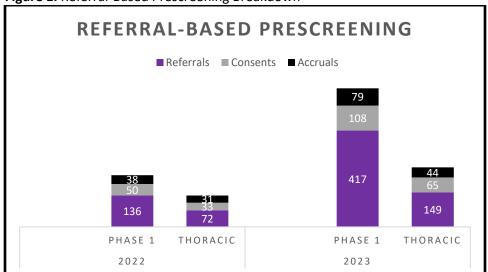
Figure 1. Referral-Based Prescreening Breakdown

REFERRAL-BASED PRESCREENING

■ Referrals ■ Consents ■ Accruals

Data shown in stacked bar chart:

	Referrals	Consents	Accruals
PHASE 1 (2022)	136	50	38
THORACIC (2022)	72	33	31
PHASE 1 (2023)	417	108	79
THORACIC (2023)	149	65	44