Category: Clinical Trial Access (Network, Satellite, and Other Multisite Accrual Enhancement Efforts) – Work in Progress

Optimizing Trial Access Through Structured Molecular Review and Nurse Navigation

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1. Background
Comprehensive genomic profiling and next-generation sequencing (NGS) have expanded opportunities for biomarker-driven clinical trials. However, translating complex molecular reports into timely enrollment is challenging due to fragmented workflows, limited provider bandwidth, and complex eligibility criteria. Research nurse navigators at Herbert Irving Comprehensive Cancer Center (HICCC) are uniquely positioned to streamline molecular trial matching and improve access to precision oncology studies.

2. Goals
Integrate molecular profiling review into research nurse navigation workflows to improve timeliness and accuracy of trial matching, increase referral-to-consent rates for genomically matched studies, and reduce missed opportunities for patients with actionable alterations.

3. Solutions and Methods
A structured, nurse-led workflow integrates weekly molecular reports to identify potential matches for targeted trials (e.g., KRAS, MTAP, SMARCA4). Nurse navigators partner closely with the bioinformatics team, which developed an algorithm to extract key molecular information directly from the medical record database. The process continues to evolve, with ongoing refinements to improve accuracy and streamline prescreening. This approach allows navigators to conduct preliminary eligibility screening, review prior therapies, and coordinate across oncologists, investigators, regulatory teams, and study staff. Molecular trackers proactively follow patients with actionable alterations, and investigators review options to ensure optimal trial matches.

4. Outcomes
Implementation of a research nurse navigator-led molecular trial matching workflow increased visibility and standardization of biomarker-driven trial opportunities across disease teams. Early observations show more proactive identification of eligible patients and shorter intervals between molecular result availability and trial consideration. In 2025, of the approximately 76 patients enrolled onto Phase 1 trials, navigator-facilitated molecular screening contributed to nearly 25 percent of targeted Phase 1 enrollments, demonstrating a measurable impact on accrual to biomarker-driven studies.

Overall, integrating structured molecular review and tracking into nurse navigation workflows has proven both practical and impactful. This model highlights the evolving role of research nurse navigators in translating genomic data into actionable trial pathways, supporting accrual to targeted studies, and reinforcing clinical trial infrastructure.

5. Lessons Learned and Future Directions
Dedicated nurse navigation and early biomarker integration streamline trial readiness, while searchable databases and provider education enhance screening efficiency and referrals. Future efforts will focus on Electronic Medical Record-linked automation, community site expansion for equitable access, artificial intelligence-assisted eligibility review, and prospective tracking of accrual and diversity metrics.