Submission ID 3413: Predictors of Navigation Resource Utilization in Cancer: A Retrospective Study

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Background and Objectives

Cancer Patient Navigation (PN) is a **Nurse-led** service dedicated to helping patients, families, and caregivers **navigate** complex **healthcare systems**.

Our Focus:

- Reducing disparities in underserved communities
- **Ensuring timely, high-quality care**
- Enhancing patient outcomes

Aim: Identify patients with the highest resource needs to guide referrals to PN services.

Objectives:

I. Measure the duration of the initial navigation encounter

II. Quantify PN encounters within 12 months post-diagnosis

III. Determine predictors of resource utilization

Methods

Newly diagnosed cancer patients (**2017–2022**) were identified from the PN Database and matched with the Cancer Registry. Data Categorization:
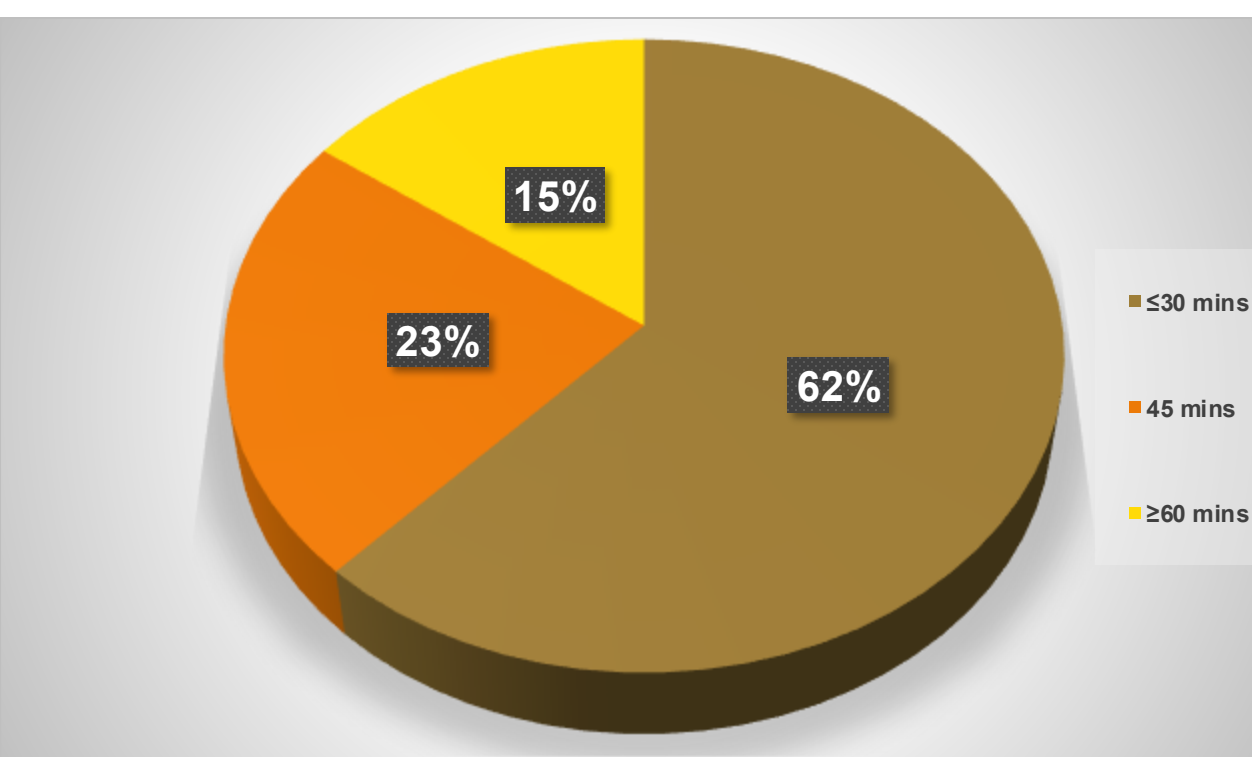
- Duration of Initial Navigation Encounter: **≤30, 45, or ≥60 minutes.**
- Number of Navigation Encounters: **1–2, 3–5, 6–10, or >10 encounters** within 12 months post-diagnosis.

Statistical Analysis: Descriptive statistics and regression analysis were used to evaluate outcomes and identify predictors of resource utilization.
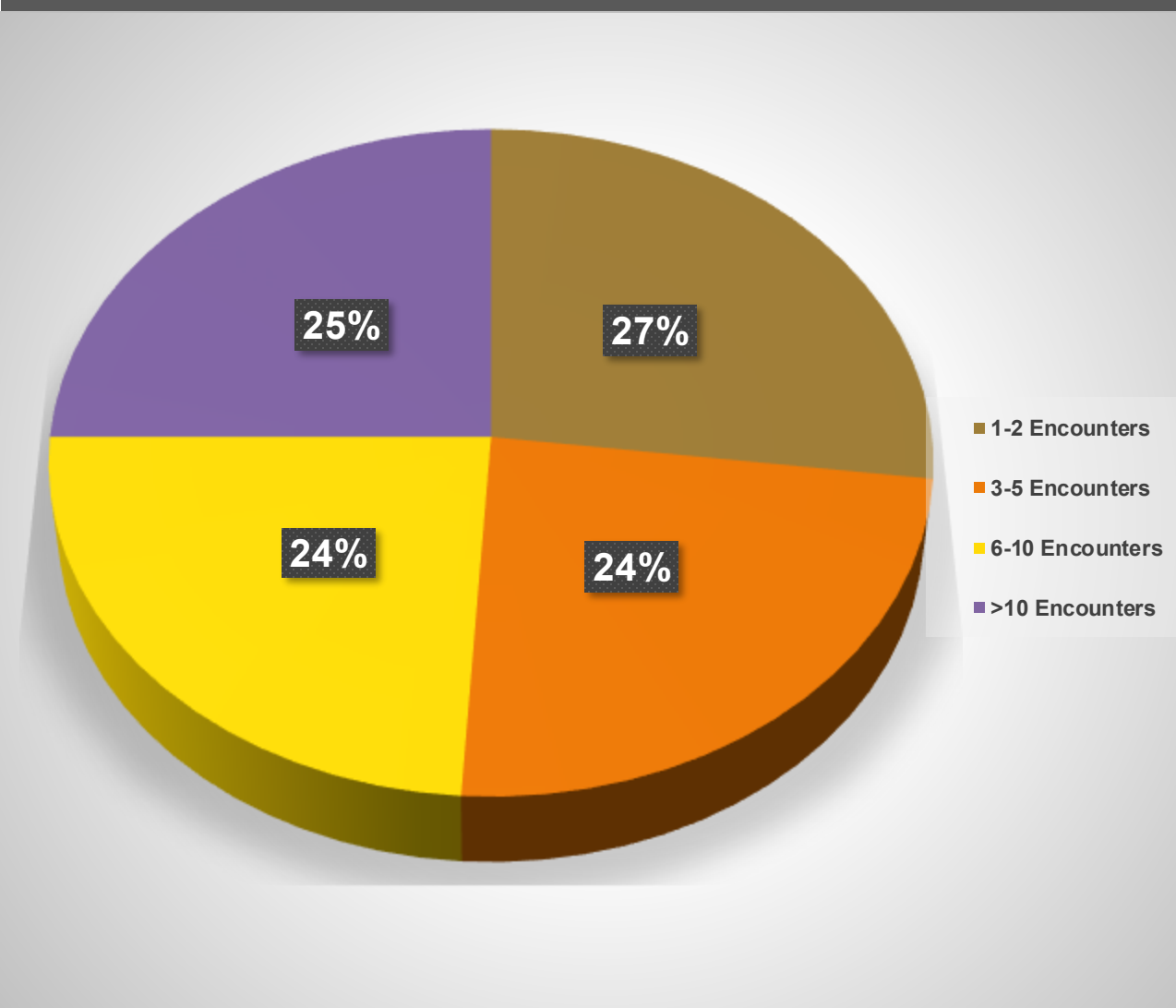
1-Demographic (N=1836)

Variables	
Median Age	63 (18-99)
Female Sex	66%
Black Race	21%
Hispanic Ethnicity	3%
Top Cancers	
Breast	37%
Hematologic	11%
Upper GI	7%
Stage	
II-IV	61%
% Federal Poverty Line (FPL)	
< 300%	61%
Rural / Urban (RUCA) Metropolitan area	89%

2-First Navigation Encounter: Duration

Legend: ≤30 mins (62%), 45 mins (23%), ≥60 mins (15%)

3-Number of Navigation Encounters

Legend: 1-2 Encounters (27%), 3-5 Encounters (24%), 6-10 Encounters (24%), >10 Encounters (25%)

4-First Encounter Duration: Predictors

Odds Ratio & 95% CL

Hematologic Malignancy 4.8; Hispanic 3.5; Breast Cancer 1.8; Stage IV 1.8; FPL <200% 1.5
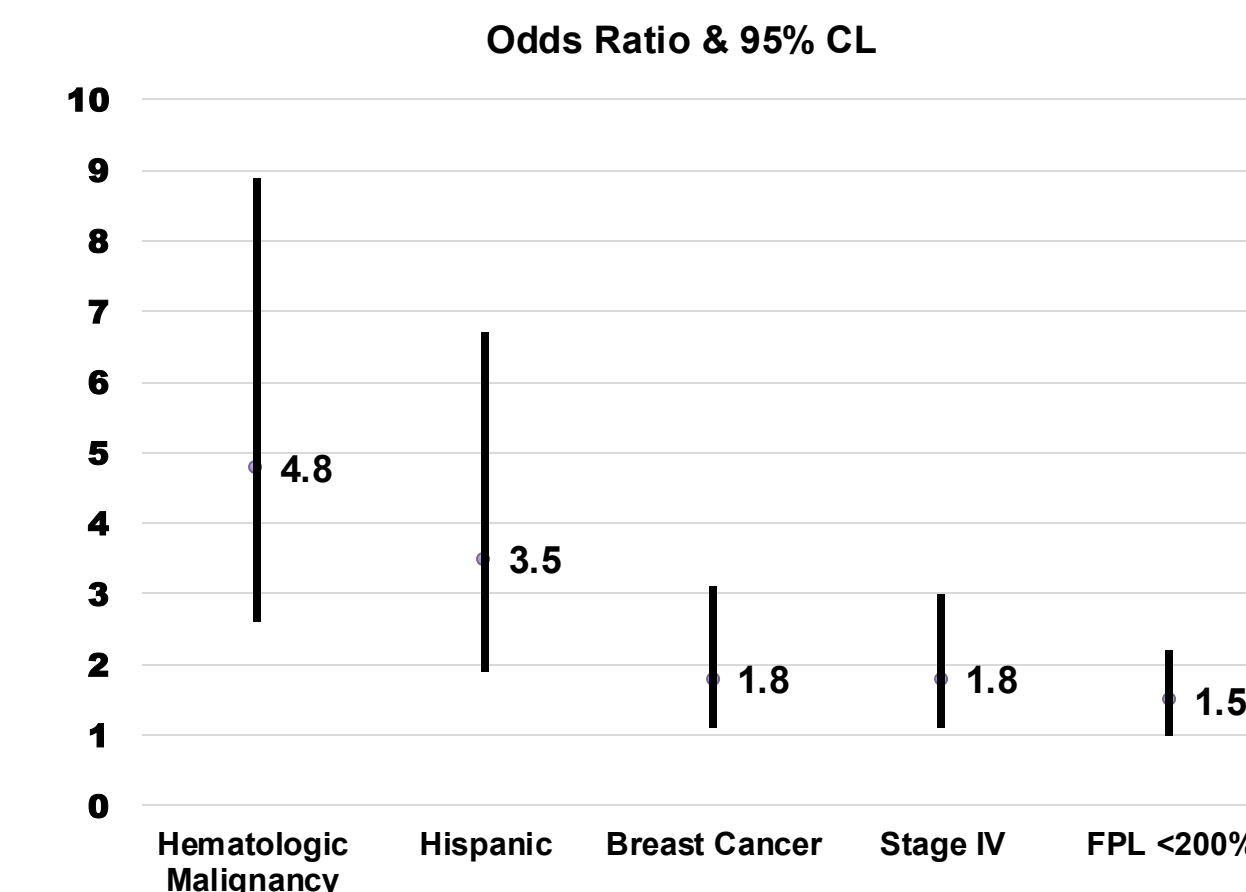
5-Number of Navigation Encounters: Predictors

Odds Ratio & 95% CL

Stage 4 Cancer 5; Breast Cancer 3.6; Upper_GI Cancer 2.1; Non-Metro Areas 1.9; Age <75 1.7; Female Sex 1.6
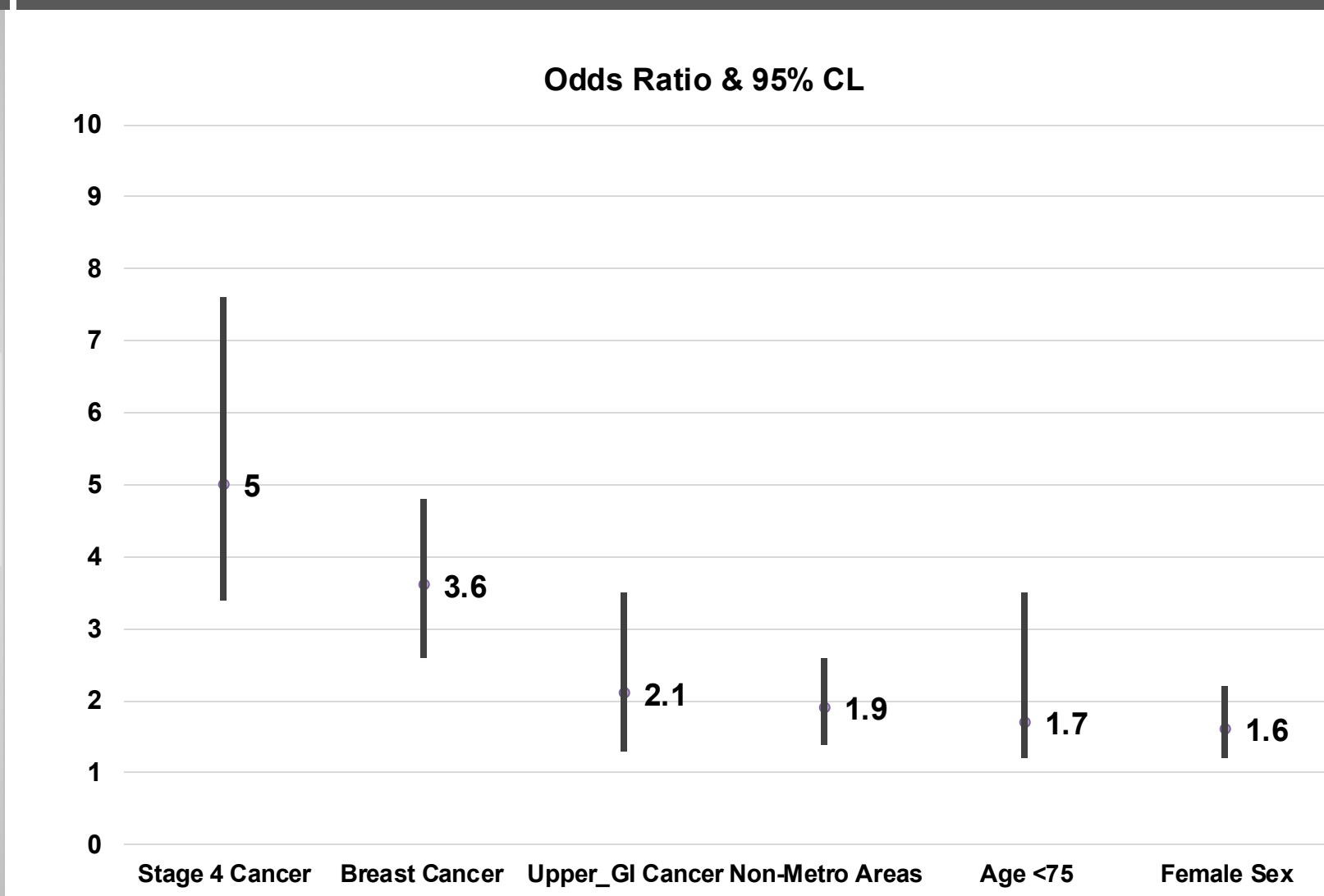
References: Age>75; Cancer Site: Lower GI; Cancer Stage: I; Ethnicity: Non-Hispanic; RUCA: Metropolitan Area; FPL: ≥ 400%; Sex: Male

Conclusions

I. A longer duration was associated with Hispanic ethnicity, cancer types, advanced disease, and lower income groups.

II. More frequent encounters were associated with younger age, specific cancer types, advanced disease stage, and residence in non-metropolitan areas.

III. Further research is needed to better identify patients with high resource needs, enabling optimized referral strategies and enhanced utilization of patient navigation services.