

Implementation of a Screening Process for Chemotherapy-Induced Peripheral Neuropathy

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BACKGROUND

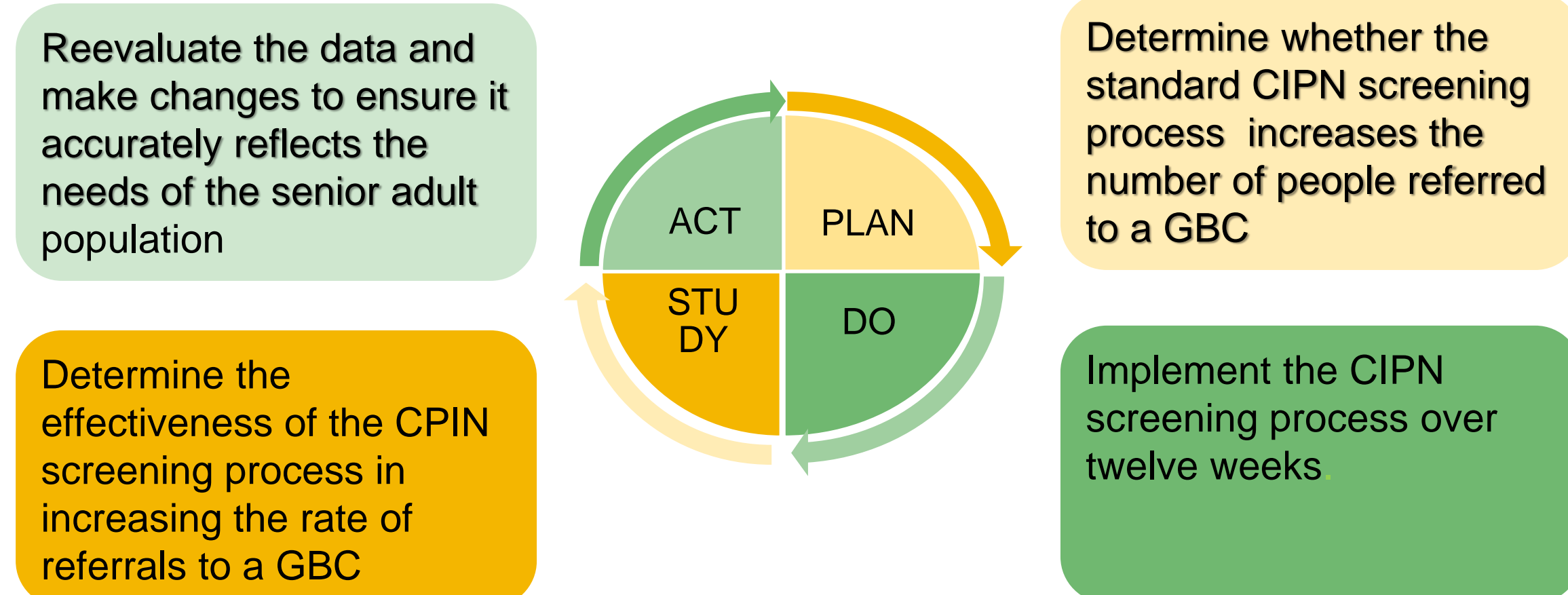
- ❖ Chemotherapy-induced peripheral neuropathy (CIPN) is a debilitating side effect of most cancer-treating drugs.¹
- ❖ CIPN can cause balance and gait deficits, which may result in a significant increase in fall incidence.²
- ❖ Exercise interventions are beneficial for reducing CIPN symptoms and improving lower extremity strength and balance.³
- ❖ The outpatient clinic needs a standardized approach to screening cancer patients for CIPN.

PROJECT PURPOSE

Purpose: To early identify CIPN to reduce fall rates in an outpatient clinic
Aim: To implement a screening process for CIPN in an outpatient clinic to improve the rate of referrals to a Gait and Balance Clinic (GBC).

Clinical Question: In patients with cancer aged 65 years and older, does the implementation of a screening process for chemotherapy-induced peripheral neuropathy compared to no screening increase the rate of referrals to a GBC over a three-month period?

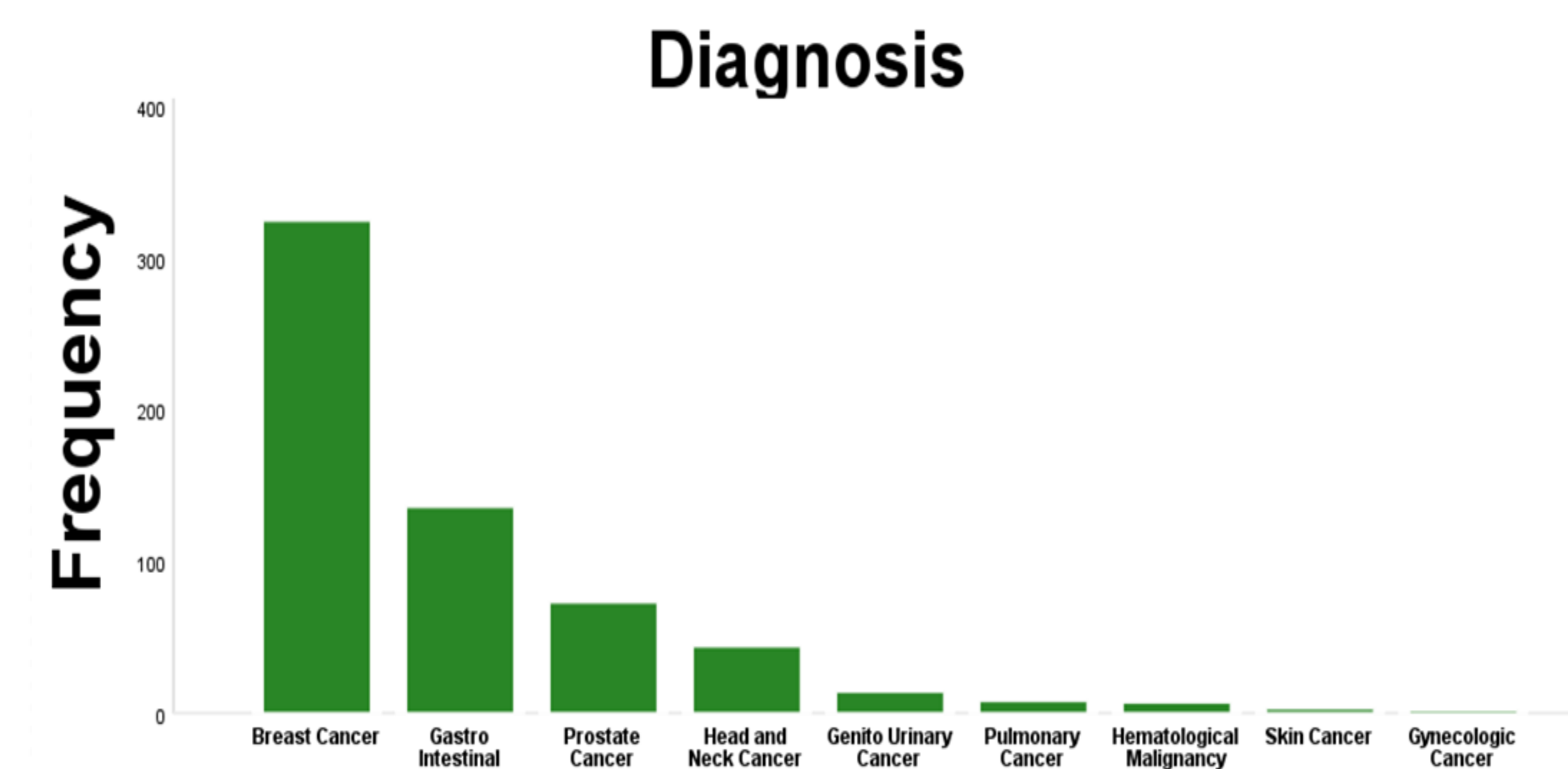
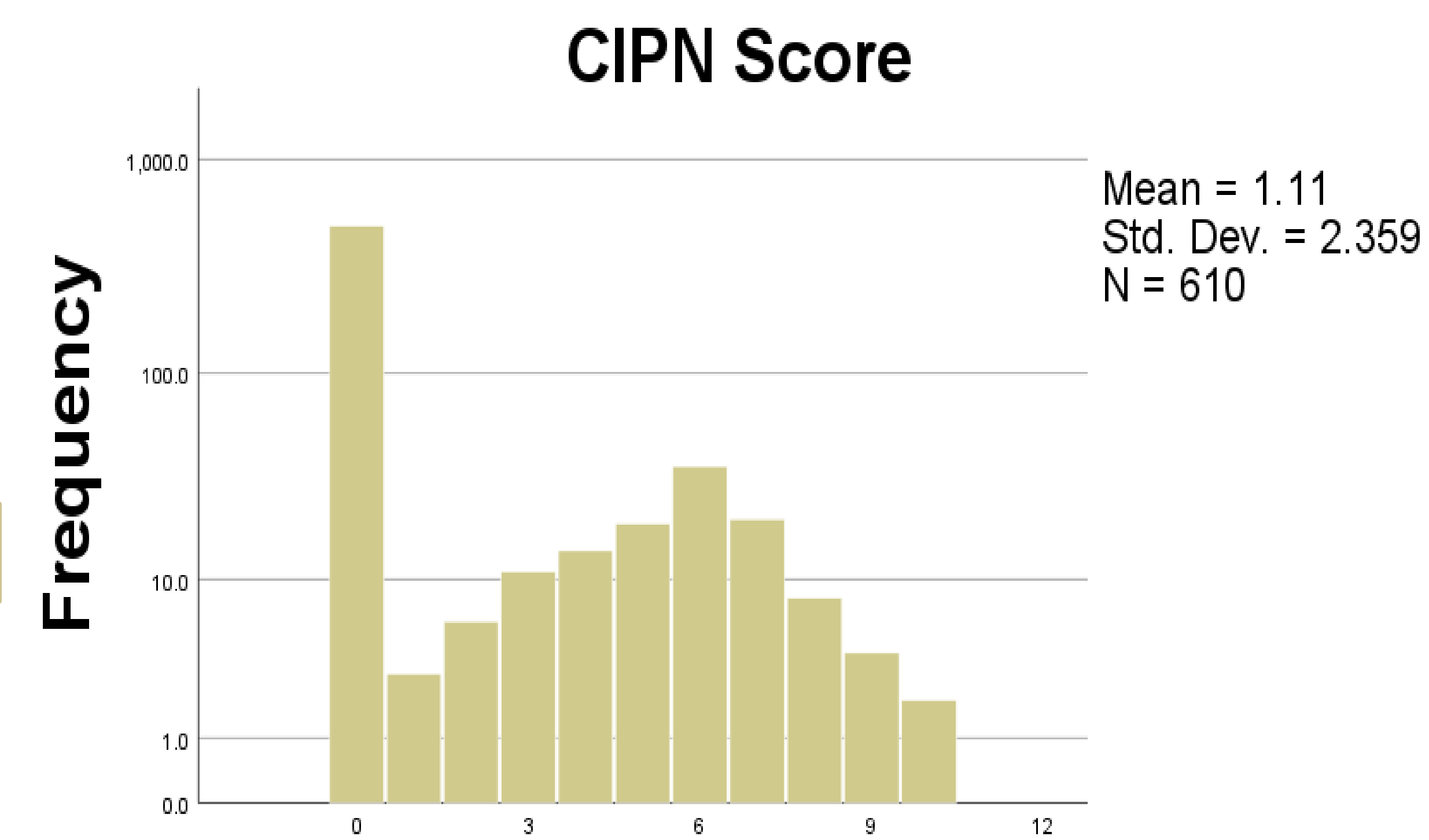
MODEL/NURSING THEORY



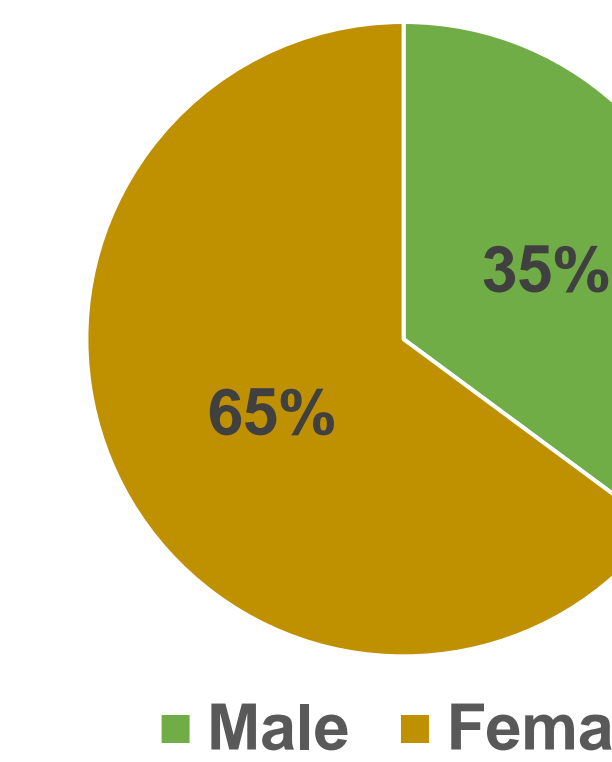
METHODS

- Participants:** 610 patients with cancer aged 65 years and older undergoing active cancer treatment
Setting: A Senior Adult Clinic at Cancer Center in West Central Florida
Outcomes: Rates of referrals to the GBC, CIPN screening, and CIPN-specific education completed
Validated Source: Electronic medical record (EMR)
Intervention and Data Collection: Implementation of the CIPN screening process over 12 weeks
- Ask 2 screening questions at every visit
 - Educate patients if CIPN score = 1-10
 - Refer to GBC if CIPN score ≥ 7
 - Collect pre- and post-implementation data

RESULTS



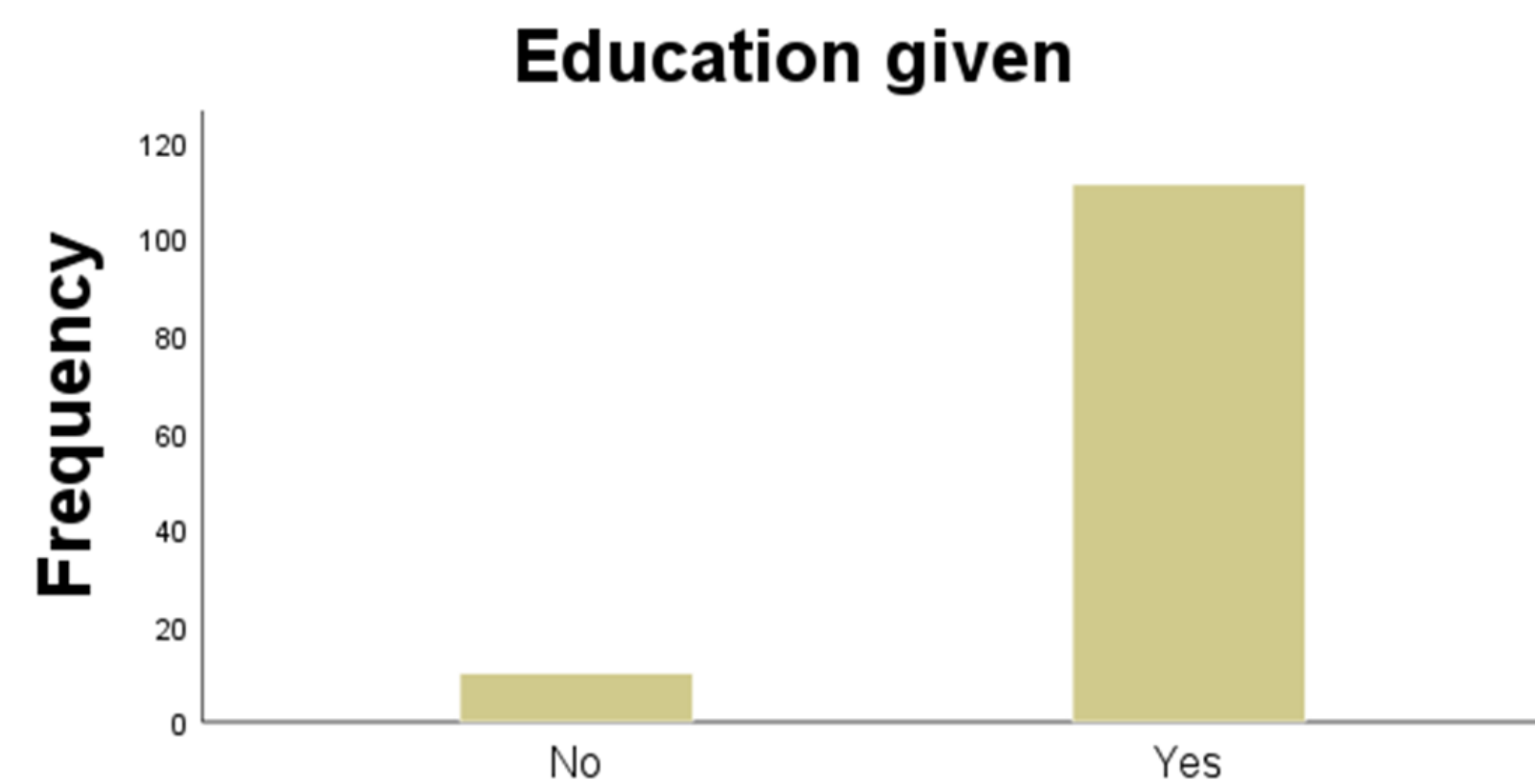
Biological Sex



Reason for Not Being Referred to GBC

	Frequency	Percent
Patient Refusal	7	20.6
Patient Receiving PT	8	23.5
Unknown	18	52.9
Missing	1	2.9
Total not Referred	34	100.0

	Mean	Standard Deviation	Minimum	Maximum
Age	76.44	6.56	40	99
CIPN Score	1.11	2.40	0	10



CIPN Education Received

	Frequency	percent
NO	10	1.1
Yes	111	12.2
Total	121	13.3

DISCUSSION

- ❖ The screening rate was 58.3%.
 - ❖ There was no significant improvement in the rate of referrals to the GBC.
 - ❖ The screening process improved the rate of CIPN education received by patients.
 - ❖ The screening questions assisted in the identification of patients at risk for CIPN; however, they did not capture all aspects of peripheral neuropathy.
- Limitations**
- ❖ Providers' perceptions
 - ❖ Staffing
 - ❖ The screening process included only 2 questions from the Chemotherapy-Induced Peripheral Neuropathy Assessment Tool (CIPNAT) questionnaire.⁴
 - ❖ Each screening question was self-reported and could have been influenced, either consciously or unconsciously, by social desirability or response bias.⁵

IMPLICATIONS FOR ADVANCED PRACTICE NURSING

- ❖ Early detection of CIPN is crucial in developing interventions to prevent or reduce CIPN-related deterioration.⁶
- ❖ Regular CIPN assessment helps to avoid further impairments, especially if patients already have a declining functional capacity.⁶
- ❖ Early screening for CIPN can help decrease fall risk and other balance problems in cancer patients.⁶
- ❖ Exercise interventions are beneficial for reducing CIPN symptoms and improving lower extremity strength and balance.³

SUSTAINABILITY

- ❖ Education about the importance of screening for CIPN will be integrated into the annual mandatory training.
- ❖ Nurse champions will be designated to ensure staff adherence and commitment to improving the screening process.

REFERENCES



The screening process assisted in the identification of patients at risk for CIPN, but it did not significantly increase the rate of referrals to the GBC.