Feasibility of patient-centered goal setting for chemotherapy-induced peripheral neuropathy: The pilot trial

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Background

- Chemotherapy-induced peripheral neuropathy (CIPN) is a common cause of chronic cancer-related pain that can impair function and quality of life.
- Conventional management and outcome measures often emphasize symptom reduction, yet patients may prioritize restoring meaningful activities, independence, and function.
- Patient Priorities Care (PPC) identifies what matters most to patients, while Goal Attainment Scaling (GAS) translates individualized priorities into measurable goals.

Objective

- To evaluate the feasibility and acceptability of integrating Patient Priorities Care with Goal Attainment Scaling in adults with bothersome CIPN and to characterize goal attainment and patient-selected health priorities.

Methods

Design	Prospective, two-arm randomized pilot clinical trial at a tertiary cancer pain center.
Participants	Adults with bothersome CIPN and average pain/bothersome symptoms ≥4/10 for ≥3 months.
Intervention	My Health Priorities online module followed by PPC tele-coaching to identify a personally meaningful SMART goal and individualized GAS measure.
Randomization	Goal-encouragement or neutral follow-up messaging; follow-up ~4 weeks later.
Primary outcomes	Recruitment, retention, GAS completion/adherence, and intervention acceptability.
Additional outcomes	Individualized goal attainment and themes among patient-selected health goals.

PIVOT Intervention Workflow

1. **My Health Priorities** — Identify values & priorities
2. **Tele-Coaching** — Develop a SMART goal
3. **Goal Attainment Scaling** — Define 5 levels of attainment
4. **~4 Weeks** — Goal pursuit ± encouragement
5. **Follow-Up** — GAS + acceptability

IRB: The University of Texas MD Anderson Cancer Center (Protocol No. 2024-1305). All participants provided written informed consent.

Participant Flow

- **36** Eligible
- **33 (92%)** Enrolled
- **27 (82%)** Completed baseline
- **23 (85%)** Completed PPC
- **22 (96%)** Completed GAS
- **20** Completed follow-up

GAS completion among PPC completers: 22/23 (96%)

Overall study completion: 20/33 (61%)

Participant Characteristics (N = 33)

62.0 Mean age	81.8% Female	5.2/10 Baseline pain	45.5% CIPN ≥5 y

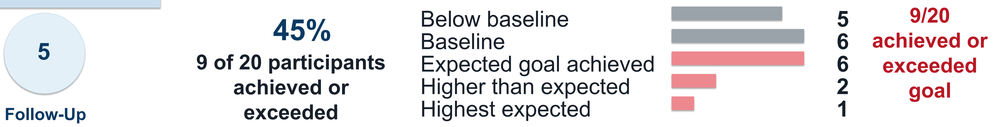
BMI, kg/m²*	32.1 ± 6.5	Breast cancer	12 (36.4%)
White race	18 (54.5%)	Multiple myeloma	6 (18.2%)
Hispanic ethnicity	7 (21.2%)	Diabetes mellitus	6 (18.2%)

*BMI available for n=29; baseline average pain available for n=27.

Goal Attainment at ~ 4 weeks

45%

9 of 20 participants achieved or exceeded their individualized GAS goal.



9/20 achieved or exceeded goal

Intervention Acceptability (N = 20)

- **70%** Enjoyed GAS
- **75%** Considered GAS justified for CIPN care
- **75%** Reported benefit to overall health
- **10%** Reported interference with daily activities

Perceived benefit was greater for overall health than for CIPN specifically: 75% vs 45%

Patient Priorities (N = 22)

77%

17 of 22 patient-selected goals focused on broader health, function, or participation rather than directly on pain/CIPN symptoms.

23%

5 of 22 goals directly targeted pain or CIPN symptoms.

Goal themes among broader health/function priorities (n = 17)

Goal theme	n (%)
Physical function & mobility	5 (29%)
Meaningful life participation	4 (24%)
Energy & vitality	3 (18%)
Medical/symptom	2 (12%)
Sleep	2 (12%)
Emotional well-being	1 (6%)

Discussion

- Among participants who progressed through PPC, GAS completion was high and acceptability was generally favorable; however, attrition was notable, with 20 of 33 enrolled participants (61%) completing follow-up
- Most individualized goals extended beyond pain or neuropathy symptoms and emphasized function, meaningful participation, energy, independence, and overall health.
- Limitations include- small pilot sample and single-center design, attrition, short (~4-week) follow-up, goal attainment and acceptability primarily reflect study completers, exploratory findings are hypothesis-generating

Conclusion

- Patient-centered goal setting using PPC and GAS was highly completed and generally well accepted among participants who engaged with the intervention, although overall study retention remained a challenge.
  Most patient-selected goals focused on restoring function and meaningful participation rather than reducing CIPN symptoms alone.

References

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