Pilot Study of a Technological Approach to Rehabilitation of Cancer Patients with Chemotherapy-Induced Peripheral Neuropathy

PRESENTER:
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BACKGROUND

Why this matters

CIPN affects over one-third of cancer patients

Symptoms can **persist long after chemotherapy ends**

Pharmacological options are limited and often ineffective

Exercise can help — but patients **need support to do it safely at home**

Digital tools + nursing supervision may enable personalized rehabilitation

OBJECTIVE

To evaluate a **mobile application** for:

- Feasibility
- Usability
- **Personalized exercise-based rehabilitation**

  ...in adult cancer patients receiving **neurotoxic chemotherapy**

METHODS

Design: Single-center, longitudinal **pilot study, n = 10** adult cancer patients receiving **neurotoxic chemotherapy**

Intervention: 12-week **digital rehabilitation program** using a mobile application

Supervised by **rehabilitation nurses**

Assessment Timeline

→ **Baseline**: Initial patient condition

→ **Week 6**: Progress review and adaptation

→ **Week 12**: Final feedback

Outcomes measured

FACT-GOG Ntx *(CIPN symptoms)*

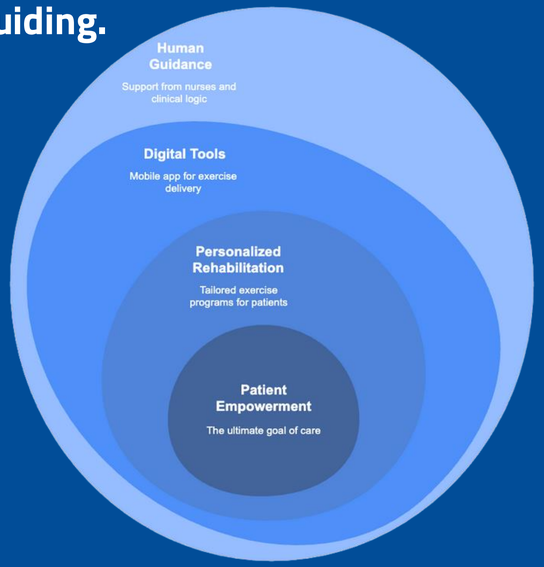
EORTC QLQ-C30 *(Quality of Life)*

System Usability Scale (SUS)

Adherence rates and patient feedback

Digital rehabilitation can support cancer patients with CIPN — when technology is guided by **clinical logic** and **nursing care**. This pilot study explores a **mobile app** that delivers personalized exercise plans, adapted by nurses and based on real patient feedback.

Empowering patients starts with listening — and guiding.



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I'm happy to discuss during or after the session.
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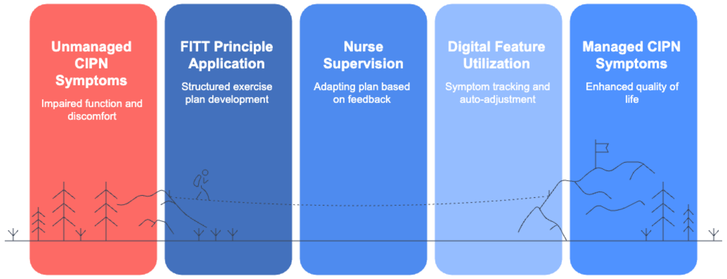
INTERVENTION LOGIC

The clinical engine behind the mHealth solution



Next Steps:

- Test feasibility and **adherence** over 12 weeks
- Collect feedback to **refine usability**
- Use findings to plan a **larger multicenter study**
- Strengthen **nursing roles in digital rehabilitation**

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References
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