

BACKGROUND

- A SNF stay is often required to address functional deficits stemming from a hospitalization, but **it does not adequately prepare patients to transition home.**¹
- Very low physical activity contributes to adverse events during and after a SNF stay such as rehospitalization.²
- To combat this pressing problem, we designed High-Intensity Rehabilitation plus Mobility (HeRo), a pilot pragmatic intervention to improve mobility and physical function while in the SNF.
- HeRo includes a high-intensity (i.e. high-weight, low repetition) rehabilitation program (i-STRONGER) combined with a structured mobility program based in behavioral economics

POPULATION

Older adults (veterans 55+) admitted to a single SNF following a hospitalization.

METHODS

- i-STRONGER was implemented in a previous study and is still the standard of care at our partner facility
- HeRo adds a mobility program delivered by a certified nursing assistant (CNA) based on the principals of behavioral economics
- Non-randomized, three stage, pre-test post-test design (Figure 1)
- RE-AIM used to evaluate implementation process

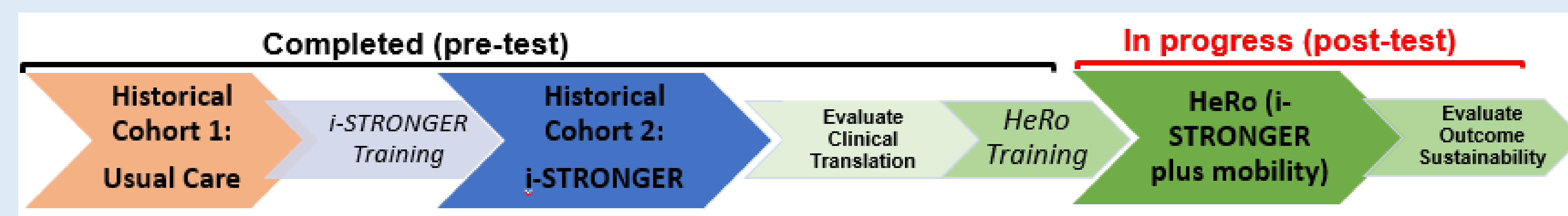


Figure 1: HeRo study design



Figure 2: Illustration of intervention: Traditional approaches to SNF rehabilitation are based in general conditioning and use resistance training infrequently. i-STRONGER seeks to flip the pyramid upside down but using high-intensity resistance training as its foundation. Our current initiative (HeRo) combines i-STRONGER with a mobility program that uses the principals of behavioral economics.

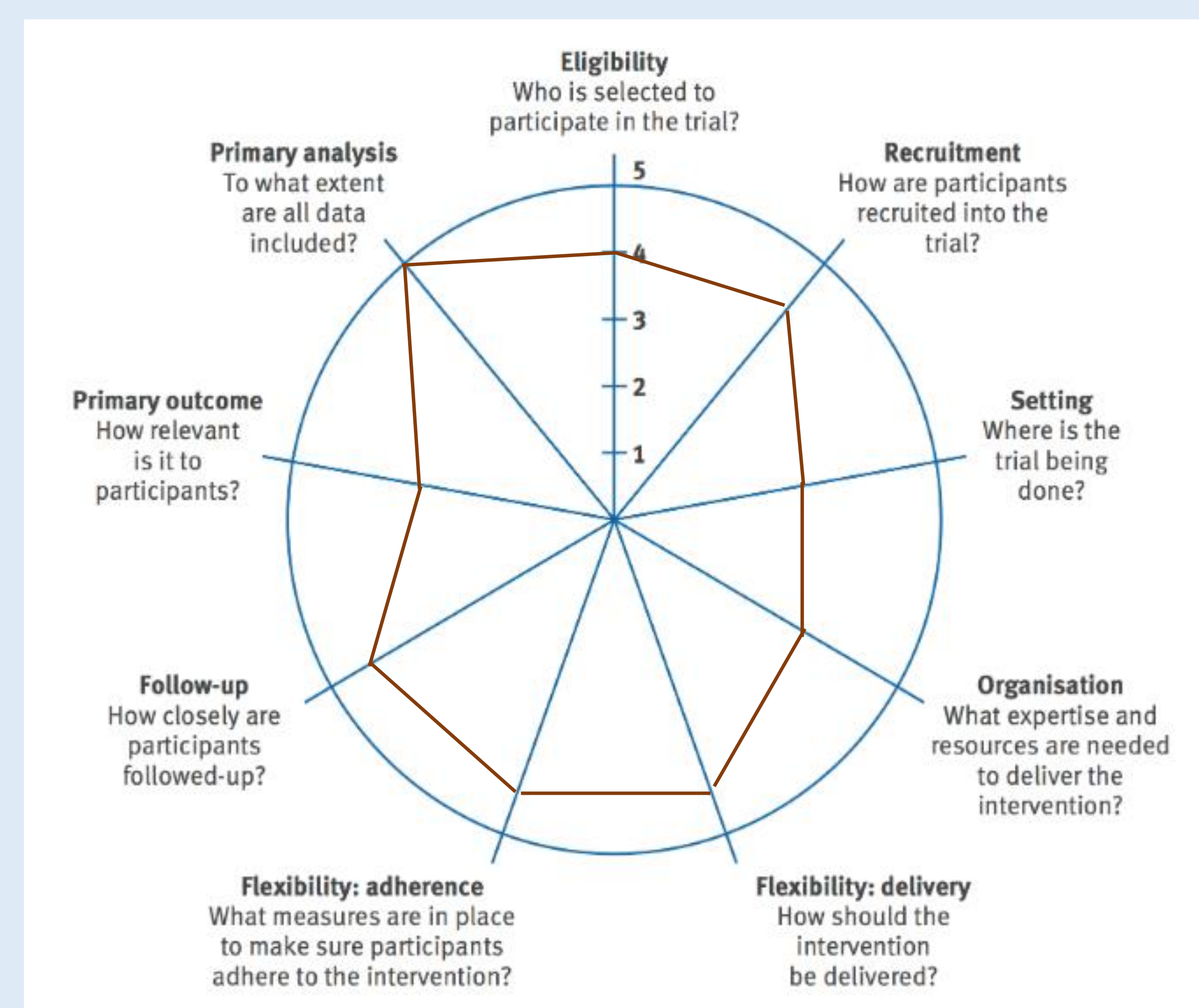


Figure 3: Maps aspects of the intervention to the PRECIS-2 tool

PRAGMATIC TRIAL CONSIDERATIONS

- Some elements of pragmatism were sacrificed for the pre-test/post-test design.
 - Treatment fidelity is closely monitored through in-person observation and documentation audits
- Setting:** We chose a SNF that has low staff turnover, treats only Veterans, and has a history of collaboration with our university

COVID-19 CONTINGENCIES

- SNFs around the world have been devastated by COVID-19, limiting mobility for all residents and creating an unanticipated change in environment
- The trial is currently on hold, but strategies to address COVID will include:
 - Virtual fidelity
 - Reevaluate selection of outcomes (i.e. length of stay has shortened to prevent exposure to SNF residents)
 - Personal protective equipment
 - Troubleshooting strategies to promote mobility in limited space.

REFERENCES

- Gustavson AM, Falvey JR, Forster JE, Stevens-Lapsley JE. *J Geriatr Phys Ther* 2017. 42(3): 182-195
 - Chawla H, Bulathsinghala C, Tejada JP, Wakefield D, ZuWallack R. *Ann Am Thorac Soc*. 2014;11(8):1203-1209.
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Benefits of Pre-test Post-test design	Limitations	Strategies to address
Pragmatic, may be necessary for single-site pilot studies where intervention contamination is likely	Time as confounder	Engage partner with less likelihood of staff turnover, Close observation of usual care, Treatment fidelity
Controls for between-site variability	Potential differences among usual care/ intervention group	Compare baseline characteristics and control for differences using ANCOVA

Table 1: Pragmatic considerations around pre-test/post-test design and HeRo study