Overcoming Challenges in Conducting Mobility Research During a Pandemic

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Background
- Hospitalized older adults are at risk for losing their ability to ambulate independently due to multiple barriers that limit walking.
- “MOVIN” (Mobilizing Older adult patients Via a systems-based INtervention), a multicomponent mobility intervention to support nurse-led ambulation, change unit culture, and improve outcomes for hospitalized adults.
- The MOVIN pilot achieved promising results; this study is a cluster randomized clinical trial to test MOVIN on 4 units starting in 2020.
- The COVID-19 pandemic posed many obstacles for research—especially clinical mobility-related interventional studies.

Purpose
- To implement the (5) components of MOVIN and monitor the change in nurse behaviors and unit culture before, during, and after the intervention period (14 weeks).
- To identify COVID-19-related barriers to the nurse-led mobility research and how the launch team maintained the integrity of the intervention.

Method
- A cluster randomized controlled trial design to implement the MOVIN components and evaluate associated patient, nurse, and process outcomes.
- Study approved by the UW IRB.
- Sample/setting: Unit #1 is a 24-bed adult moderate acuity cardiac unit in a large urban Magnet quaternary medical center in Wisconsin.
- Measures: Ambulation (feet) distances based on nursing flowsheet documentation; Therapy ambulation captured from notes.
- Procedure: Implement MOVIN components: psychomotor training (13 RNs & 2 CNAs), install walking distance markers, & white boards, provide walkers, training materials (all staff), & ambulation aide (1.0 FTE). Use incentives to create “MOVIN” culture (gift cards, treats, mileage goals, etc.).

Results: Unit Outcomes – 2 Years

- Figure 2. Monthly graph of the percent (%) of patients ambulated by nursing showing a sustained 20% increase in percent of patients ambulated over time.

- Figure 3. Monthly graph of ambulation distances (miles) documented by discipline. Nursing-led ambulation (blue line) averaged 60 miles/month (540% above baseline) with AA at 1.0 FTE. Distance decreased with reduced AA dose. Remains at 25 miles/month (>200% baseline).

- Figure 4. Walking 50 miles to Lake Geneva! Bulletin board example of celebrating mileage goals.

Conclusions
- MOVIN is a promising system-based intervention to promote nurse-initiated patient ambulation.
- The intervention was associated with an increase in percent of patients ambulated and sustained over time.
- Nurse-led ambulation distances were highest when the Ambulation Aide was in place at 0.5 to 1.0 FTE. Ambulation distances remained significantly above baseline over time but not at the level achieved when the dedicated role was in place.

Lessons learned
- Staff committed to MOVIN but physically and emotionally challenged by the pandemic and the aftermath.
- Celebrating the achievement of ambulation goals is motivational (tangible sense of achievement)
- Staff input was used to improve the process (Incentive choices, fun activities, paper surveys, etc.)
- Unit and personal performance goals established to maintain the MOVIN culture after study completion.

Implications
- Real-world research requires vigilant maneuvering around obstacles to ensure the integrity of the study.

References

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