Transforming elderly care in PACE settings through Virtual Avatars

Improving health outcomes despite higher risk scores

Advancing elderly care requires continuous research and innovation. This presentation showcases how interdisciplinary teams, leveraging care.coach avatars, can significantly improve health outcomes. By enhancing communication and enabling proactive interventions, these virtual avatars help reduce emergency visits and falls, even among high-risk participants. Discover how research in PACE settings underscores the vital role of technology in transforming care delivery.

Authors:

Alexandra Patterson
MSN-PH Student

Eric Warden
LPC, Customer Success Executive at care.coach

Tom Muszynski
RN, COO at Care Resources

Garth Falkins
CTRS, Recreation Therapy Manager at Care Resources

Program best practices

The successful integration of care.coach avatars into Care Resources PACE has been driven by structured monthly meetings between care.coach representatives and Care Resources staff. These meetings, along with regular training sessions—both virtual and in-person—have helped align the company and Care Resources' interdisciplinary team (IDT) to develop effective care plans and functionalities. This collaboration has enabled us to use the care.coach device as a valuable tool to enhance participant care.

By ensuring quick responses to clinical escalations, often followed by the IDT "closing the loop" through care.coach's Video Visit feature, participants experience significant relief. This coordinated approach has not only reduced falls and ER visits but also strengthened continuity of care, ensuring participants feel supported and connected throughout their care journey.

01 Introduction

In a groundbreaking study by Care Resources PACE, 45 participants utilizing care.coach avatars were compared to a control group of 45. Despite higher initial risk scores, those with access to care.coach avatars showed significant reductions in both falls and emergency room visits.

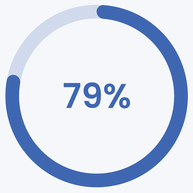
Over six months, this incorporation of interactive technology not only improved health outcomes but also delivered substantial cost savings. This study highlights the critical role of interdisciplinary teams and innovative technology in elevating the standard of care for elderly populations.

02 Objective

- **Analyze the role of IDTs:** Attendees will be able to analyze how interdisciplinary teams leverage care.coach avatars to enhance communication and address service needs, particularly in managing chronic condition exacerbations within PACE settings.
- **Evaluate continuity of care:** Attendees will learn how the integration of virtual avatars in the home environment strengthens continuity of care and improves connections between participants and their IDTs, leading to more proactive interventions.
- **Apply strategies to optimize care delivery:** Attendees will be able to apply strategies that demonstrate the effectiveness of virtual avatars in reducing emergency department visits, mitigating exacerbations, and preventing falls among elderly participants.

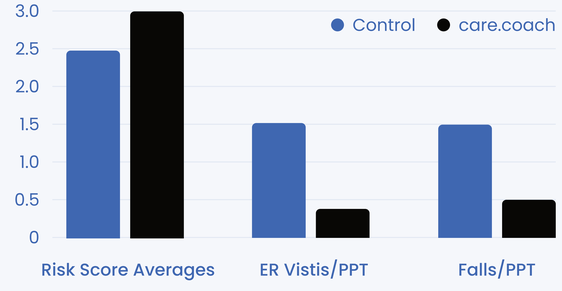
03 Method/analysis

This study involved two groups of 45 participants each: one group using the care.coach device and
a control group without it. Data on falls, ER visits, and risk scores were collected over six months and analyzed. Statistical methods, including the Welch's test, were used to ensure the results accurately reflect the impact of care.coach on participant outcomes.



Reduction in ER visits compared to the control group

Reduction in falls compared to the control group



04 Results/findings

The incorporation of care.coach by the IDT significantly improved key health outcomes compared to the control group.

- **ER Visits:** care.coach users averaged 0.29 ER visits over six months, a 79% reduction compared to the control group's 1.4 visits.
- **Falls:** The care.coach group saw a 50% reduction in falls, with 0.8 falls compared to 1.6 in the control group.
- **Cost savings:** ER costs dropped from $226,800 in the control group to $46,980 for care.coach users, saving $179,820 over six months.
- **Engagement:** Participants used the device for 21 minutes/day and reported high satisfaction, citing benefits like companionship and health reminders.

The reduction in ER visits was consistent regardless of interaction time.

05 Conclusion

This study examined the use of care.coach avatars in PACE settings and revealed three key findings:

- **Reduced falls:** Participants with avatars had fewer falls, even with higher risk scores, showing the technology's potential to enhance safety.
- **Fewer ER Visits:** The group using avatars experienced a significant drop in emergency room visits, underscoring the effectiveness of improved communication and proactive care by IDTs.
- **Stronger care continuity:** Virtual avatars strengthened the connection between participants and their IDTs, leading to more consistent and effective care.

Implications: These results suggest that integrating virtual avatars in elderly care can improve outcomes and reduce costs. Future studies should explore long-term effects and broader applications, with a recommendation to expand this approach within PACE programs.

Related literature

Mushtaq, A., & Khan, M. A. (2023). Social isolation, loneliness, and mental health among older adults during COVID-19: A scoping review. Journal of Gerontological Social Work. Research is often built on something that is already out there. Cite key references that you looked at while conducting_your study.

Ranganathan, P., & Aggarwal, R. (2017). Common pitfalls in statistical analysis: Linear regression analysis. Perspectives in Clinical Research, 8 (2), 100. Research is often built on something that is already out there. Cite key references that you looked at while conducting your study.