Empowering PACE teams through technology: a data-diven look at the Palm Beach PACE & care.coach collaboration

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This poster explores how the collaboration between Palm Beach PACE and care.coach has empowered the Interdisciplinary Team (IDT) to deliver personalized, proactive care.

Introduction

Palm Beach PACE launched care.coach avatars in February of 2024. With the primary goal of reducing falls. Palm Beach PACE closely examined participant fall history and selected participants with high risk for recurring falls.

This poster examines the integration of these virtual care avatars into participant care, focusing on their significant role in fall prevention. The avatars spent extensive time engaging participants in exercises and coaching them on safety practices specifically aimed at reducing falls. The utilization of services data highlights that the majority of avatar interactions centered around falls prevention activities, followed by safety coaching and engaging participants in music and exercise routines. These avatars act as an extension of the interdisciplinary team (IDT), providing continuous, personalized support that enhances participant safety and well-being.

This collaboration aimed to enhance participant safety and reduce falls. Data collected from November 2023 to June 2024 highlights the impact of the avatars on key metrics such as fall prevention and participant engagement. The findings underscore how technology-driven care can empower IDT members to deliver more personalized and proactive care, ultimately improving participant outcomes.

How participants view their avatars

> " You have always been a lifesaver and you keep on saving my life.

> " It is always there for me and I can wake it up at any time I want.

Avatar escalation

> " She asked for help because her back is in pain. She is worried she might fall-down and get hurt.

Methodology

We collected participant fall data before they started with care.coach and while they used care.coach. The data collection period was from November 2023 to June 2024 and was gathered from EMR captured fall reports and care.coach Power BI captured reports.

Participants were placed on care.coach Falls Prevention Protocols upon enrolling with their avatar. The falls protocol consists of preventative exercises, safety coaching, monitoring, and inquiries about durable medical equipment (DME) use and recent falls.

Analysis

The deployment of care.coach avatars at Palm Beach PACE resulted in a notable reduction in fall incidents among these 22 participants:

- **Targeted participant outcomes:** High-risk participants saw a 54% reduction in fall rates, dropping from 0.1020 before avatar deployment to 0.0465 during the deployment.
- **Overall reduction in falls:** The average rate of falls per day decreased by 74%, from 0.0152 before avatar deployment to 0.0039 during the deployment period.
- **Zero fall incidents:** Several participants who experienced falls before the deployment of avatars had zero fall incidents during the deployment period, demonstrating the technology's effectiveness in preventing falls altogether for certain individuals.

These findings highlight that care.coach avatars not only contributed to an overall 74% reduction in falls but also helped some participants reach zero fall incidents, particularly among those previously at risk, while still achieving a significant impact on high-risk participants.

Results

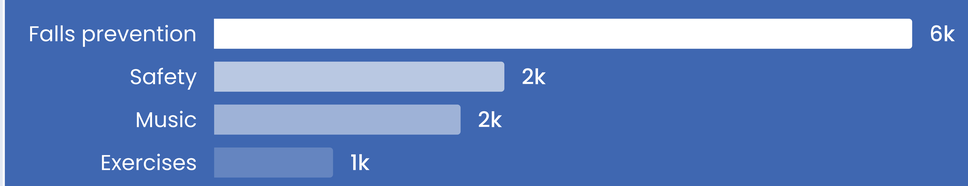
Participants enrolled in care.coach showed significant improvements, with a 74% overall reduction in fall rates—from 0.0152 falls per participant day before care.coach to 0.0039 during its deployment. Among high-risk participants, the fall rate decreased by 54%, dropping from 0.1020 falls per participant day to 0.0465. Several high-risk participants had zero fall incidents during this period, despite previously experiencing falls.

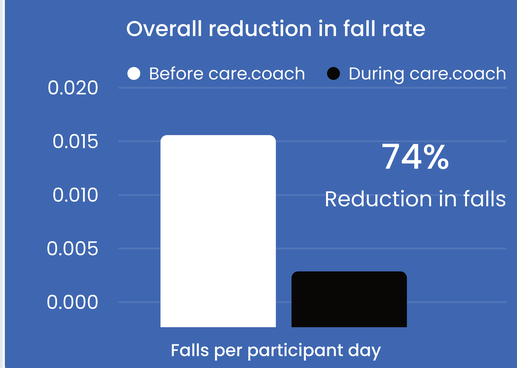
Avatars were highly engaged with participants, logging over 6,000 fall prevention activities, 2,000 safety coaching sessions, 2,000 music interactions, and 1,000 exercise routines. Additionally, 86% of participants reported increased use of mobility devices, due to the avatars' consistent reminders.

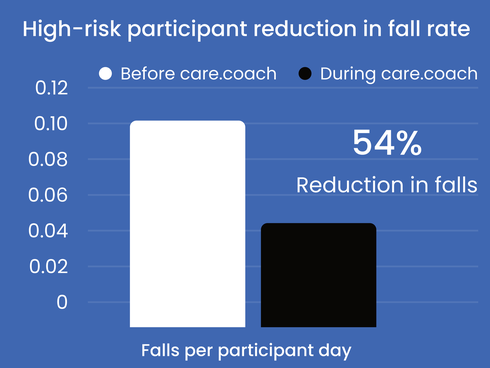
Interaction minutes a day
21

Reported using mobility device
86%

Top activities with Avatar







Conclusions

The integration of care.coach avatars at Palm Beach PACE has demonstrated a substantial impact on participant safety, reducing falls by 74% while fostering greater engagement and confidence in mobility. The consistent use of avatars for daily interactions, safety monitoring, and personalized care has empowered the IDT to provide more proactive and tailored support. Moving forward, continued expansion of avatar deployment and the refinement of features will further enhance participant outcomes and care team efficiency.

Related literature

Bott, N., Wexler, S., Drury, L., Pollak, C., Wang, V., Scher, K., & Narducci, S. (2019). A Protocol-Driven, Bedside Digital Conversational Agent to Support Nurse Teams and Mitigate Risks of Hospitalization in Older Adults: Case Control Pre-Post Study. Journal of medical Internet research, 21(10), e13440. Research is often built on something that is already out there. Cite key references that you looked at while conducting your study.

Derek Hersch, Kristen Klemenhagen, Patricia Adam, Measuring continuity in primary care: how it is done and why it matters, Family Practice, Volume 41, Issue 1, February 2024, Pages 60-64, Research is often built on something that is already out there. Cite key references that you looked at while conducting your study.