Dividat Partners with Camarillo Health Care District for Case Study



Background

Camarillo Health Care District is a premier partner for community-based health services and is recognized throughout California and the nation as an innovative champion of wellness and aging services. As a leader in health and disease prevention and health promotion since 1969, Camarillo Health Care District offers a broad range of interactive, evidence-based health and wellness programs that educate people about chronic health conditions, and guide people toward increased activity and healthy life choices.



Case Study Overview and Objectives

According to a Health Promotion Coach from Camarillo Health: "As we get older, our executive function slows. Because of that, people's response is not as quick, and we are more prone to falls. Also, we know from studies the more afraid you are of falling, the more likely you are to fall. So, the idea of the Senso balance machine is to use your executive function at the same time as you are improving your motor control. Basically, it's the dual tasking of working on your fall reduction and working on your cognition."



Raise awareness, knowledge and best practices for Camarillo community older adults to improve their overall health and wellbeing while reducing fall risk.



Improve reaction time, attention and processing, short term memory, balance control and cognitive and physical flexibility.



Use standardized tests to include the Flexibility Test, Go-NoGo Test, Stroop Test, and Sway Test using the Dividat Senso, SPPB and 6CIT for pre and post assessment and values.



Build confidence, increase daily activity level, and improve physical and mental capacities that will activate the pursuit of additional programs and activities that foster independence.



Case Study Details



32 Subjects



65-95 Years



Average Age:



Gender



Train 20 minutes 2 times/week for 8 weeks



Evaluation Points: Pre & post tests of the 8-week program



Data Output



Pre and post Dividat Senso digital assessment values



Pre and post SPPB form comparisons



The game "Simple" reaction time results



41% of participants who completed the program enrolled in additional fall prevention/exercise activities



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Results (% reflects the overall group average)

The Game "Simple"	Trains focused attention, psychomotor processing speed and overall cognitive motor reaction time	17%	Improved Reaction Time
Stroop Test	Measures attention & processing speed using average reaction time in milliseconds as well as measuring error rate	16.57% 32.25%	Improved Reaction Time Decrease in Errors
Sway Test (Romberg)	Measures postural control using maximum deviation, mean sway speed, anterior/posterior sway, medial/lateral sway and sway path length	9.23%	Decrease in Fall Risk





Case Study Summary

- The Program proved that with consistent minimal training, older adults are able to achieve substantial improvements in their cognitive/motor skills.
- The training effect of the "Simple" game showed the results translated to quicker reaction time and improved motor control.
- Results for the Sway Test reflect improved balance function translating to a reduction in fall risk for participants.
- The Stroop test results verified that utilizing a Think & Move™strategy improved attention and processing speed.
- The SPPB results showed that all participants felt less at risk of falling.
- A direct correlation was made between improving quality of life and increasing independence and interest to participate in other programs.



Program Survey Summary from Inception

Summary inclusive of <150 participants

74%

feel more confident when walking and navigating spaces

65%

feel more satisfied with their life

77%

feel that their ability to understand and process directions improved

92%

would recommend this program to a friend or relative

70%

feel more comfortable increasing their activity

98%

were satisfied with the Program

