Functional Mobility, Employment and Safety Benefits of Seat Elevating Devices.

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Lay Summary

The purpose of this retrospective study was to evaluate the relationship between use of Seat Elevating Devices (SEDs) on power wheelchair user satisfaction in performing common activities of daily living as measured by the Functional Mobility Assessment (FMA) and associated Uniform Data Set within an existing wheelchair outcomes registry. The sample consisted of 1,733 power wheelchair users and compared cases who had a seat elevator (n=265) versus those who did not have one (n=1468). Results showed those with SEDs had statistically significant higher total FMA scores, higher reach and transfer scores, had higher rates of reported employment, and fewer reported falls than those without SEDs. These findings were likely due to SEDs promoting safer transfers by allowing a person to align surfaces so that they are level thus reducing falls during transfers. Additionally, SEDs allow people to more effectively reach and carry-out tasks at different surface heights. SEDs further facilitates face to face communication and visibility. This study is the first to use large datasets to provide stronger research evidence to the benefits of SEDs to improve overall functional mobility, transfer, reach, facilitate employment, and reduce falls.

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