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Identification of factors that affect the adoption of an ergonomic intervention among Emergency Medical Service workers

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This study explored factors contributing to intervention adoption decisions among Emergency Medical Service (EMS) workers. Emergency Medical Service workers (n = 190), from six different organisations, participated in a two-month longitudinal study following the introduction of a patient transfer-board (also known as slide-board) designed to ease lateral transfers of patients to and from ambulance cots. Surveys administered at baseline, after one month and after two months sampled factors potentially influencing the EMS providers' decision process. 'Ergonomics Advantage' and 'Patient Advantage' entered into a stepwise regression model predicting 'intention to use' at the end of month one ($R^2 = 0.78$). After the second month, the stepwise regression indicated only two factors were predictive of intention to use: 'Ergonomics Advantage,' and 'Endorsed by Champions' ($R^2 = 0.58$). Actual use was predicted by: 'Ergonomics Advantage' and 'Previous Tool Experience.' These results relate to key

concepts identified in the diffusion of innovation literature and have the potential to further ergonomics intervention adoption efforts.

Practitioner Summary. This study explored factors that potentially facilitate the adoption of voluntarily used ergonomics interventions. EMS workers were provided with foldable transfer-boards (slideboards) designed to reduce the physical demands when laterally transferring patients. Factors predictive of adoption measures included perceived ergonomics advantage, the endorsement by champions, and prior tool experience.

Keywords:

intervention adoption | ergonomics intervention | injury prevention | EMS | firefighter

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