

P34 - A SUCCESSFUL KNOWLEDGE TRANSLATION INTERVENTION IN LONG-TERM CARE: RESULTS FROM THE VITAMIN D AND OSTEOPOROSIS (VIDOS) CLUSTER RANDOMIZED TRIAL (STUDENT POSTER)

Courtney Kennedy¹, Alexandra Papaioannou¹, George Ioannidis¹, Lora Giangregorio², Lehana Thabane¹, Suzanne Morin³, Richard Crilly⁴, Sharon Marr¹, Robert Josse⁶, Lynne Lohfeld¹, Laura Pickard¹, Mary-Lou van der Horst⁷, Jackie Stroud⁸, Glenda Campbell⁸, Lisa Dolovich¹, Anna Sawka⁹, Lynn Nash¹, Ravi Jain¹⁰, Carly Skidmore¹, Jonathan Adachi¹. ¹McMaster University, ²University of Waterloo, ³McGill University, ⁴University of Western Ontario, ⁶University of Toronto, ⁷Schlegel-University of Waterloo Research Institute for Aging.
Contact: kennedyc@hhsc.ca

Brief Description of Research or Project: The Vitamin D and Osteoporosis Study (ViDOS) was a knowledge translation initiative aimed at increasing the uptake of Vitamin D and fracture prevention strategies in Ontario long-term care (LTC) homes. We used a cluster-randomized trial to evaluate our intervention, randomizing homes to either control (n=21) or intervention (n=19) arms. Interdisciplinary Professional Advisory Committees in the intervention homes participated in 3 interactive sessions over 12-months, including webinars led by osteoporosis specialists, action planning for quality improvement, audit & feedback reports, and point-of-care tools. Results indicate that the multifaceted knowledge translation intervention significantly improved prescribing of appropriate vitamin D and calcium. **Why is this research important to profile at the Research Day 2014?** Vitamin D reduces falls, and calcium and vitamin D reduce fractures in long-term care (LTC) residents. At the previous LTC research day, we presented our ViDOS knowledge translation model, and included qualitative results from interviews with Medical Directors, Directors of Care, and pharmacists. Results indicated that the ViDOS intervention was well received and was perceived as a feasible model for increasing use of best practice guidelines within LTC. Many respondents indicated that the intervention increased knowledge and produced system-wide changes, including greater knowledge and acceptance of guidelines by nursing and medical staff. Our final quantitative results indicate that baseline prescribing rates for vitamin D (≥ 800 IU/day) and calcium (≥ 500 mg/day), respectively, were 39% and 33% for intervention homes and 42% and 35% in control homes. After 12-months, vitamin D (≥ 800 IU/day) was prescribed to 72.4% of residents in the intervention arm versus 49.4% in the control arm [Odds Ratio (OR) = 3.14, 95% confidence interval (95% CI): 2.23, 4.41]; and calcium (≥ 500 mg/day) was prescribed to 45.5% of residents in the intervention arm versus 37.5% in the control arm (OR=1.59, 95% CI: 1.12, 2.25). This intervention demonstrated that an interdisciplinary, multifaceted knowledge translation intervention significantly improved prescribing of appropriate vitamin D and calcium in the LTC setting. Our focus was on improving osteoporosis and fracture prevention, however this model of knowledge translation could potentially be applied to other areas requiring

quality improvement. Additionally, we hope to promote our tools, resources, and new guidelines with an Ontario Osteoporosis Strategy resource table.