Statistical Model for Predicting Falling in Humans

Technology:

Falls by individuals over 65 years of age are the leading cause of injury death. Fall-related injuries, including hip fractures and traumatic brain injuries, and associated costs, are expected to increase as a substantial proportion of the population ages. Drugs for pain and hypertension, and antidepressants appear to induce the greatest fall risk. A novel computer model based on height, weight, medical and other conditions, in addition to medications, has been invented by an NSU researcher. Data from approximately 3,300 patients aged 65 and older were used to develop the algorithm. The product would allow healthcare providers to assess the patient's risk of falling in light of drug benefits; in some cases, clinicians may wish to evaluate changing the medication. Further, the computer product can correctly identify fallers 92-95 % of the time, as compared with 70-80% with other appraisal tools.

Opportunity:

Fall-related injuries and related medical costs are anticipated to escalate as the demographics of the population change. The product would be useful in clinical settings, pharmacies and health insurance companies seeking to reduce fall-related injuries and associated costs.

Nova Southeastern University is seeking to develop collaborative partnerships and licensing opportunities for this technology.

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