



Jeffrey Williams, DNP, RN, CCRN, CCNS
Assistant Clinical Professor
Texas Woman's University – Dallas, TX



Disclosure / Objectives

Jeffrey Williams, DNP, RN, CCRN, CCNS Texas Woman's University Nothing to disclose- No monetary support, no sponsorships, and no commercial support.

- 1. Identify how translational research can be utilized for implementing evidence-based practices.
- 2. Evaluate fall prevention strategies in the older adult patient population.





Project Goals

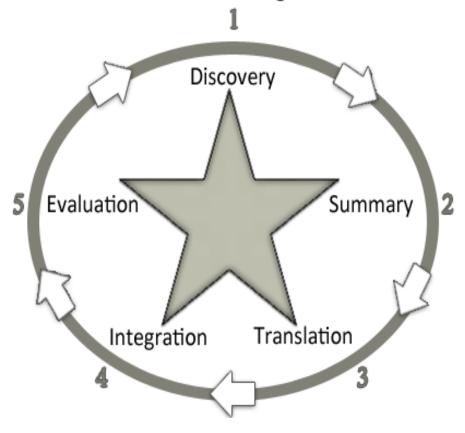
- Review and synthesize the current literature
 - Fall risk assessment/fall risk screening
 - Multifactorial interventions for fall prevention strategies
- Translate an existing fall prevention algorithm into an adapted version for use in the acute care setting
- Pilot the adapted algorithm on one acute care unit





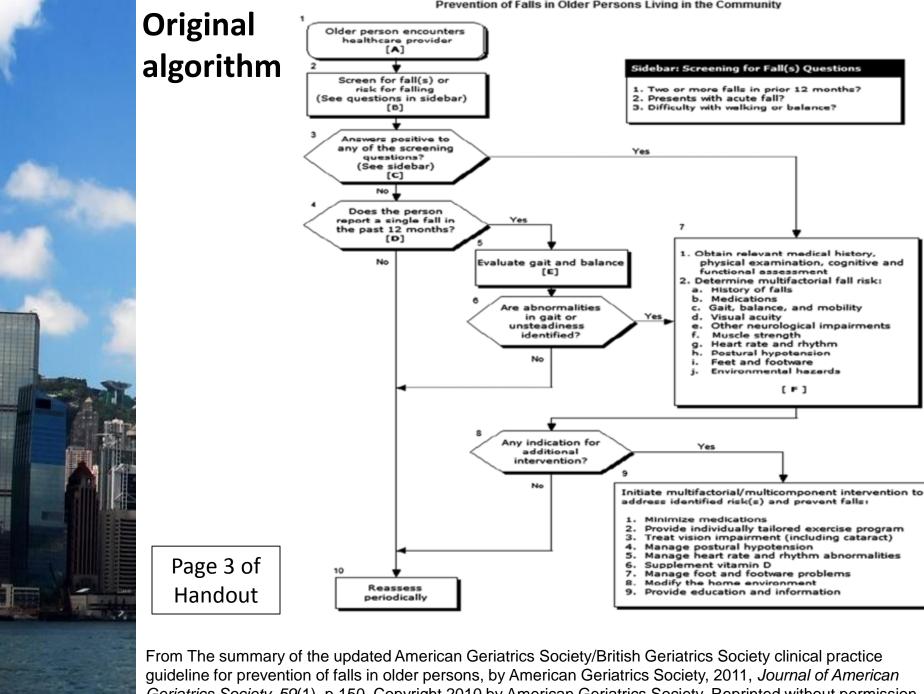
Guiding Framework: ACE Star Model

ACE Star Model of Knowledge Transformation



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From *ACE Star Model of EBP: Knowledge Transformation*. By K. Stevens, 2004, Academic Center for Evidence-based Practice. The University of Texas Health Science Center at San Antonio. Copyright 2004 by Academic Center for Excellence. Reprinted with permission



guideline for prevention of falls in older persons, by American Geriatrics Society, 2011, Journal of American Geriatrics Society, 59(1), p.150. Copyright 2010 by American Geriatrics Society. Reprinted without permission.



Review of the Literature

Literature search and review for fall prevention strategies

Fall risk assessment/fall risk screening

Multifactorial interventions





Fall risk assessment/screening

- Multiple research articles support the use of a fall risk assessment/screening tool
 - Assessment tools that are specific to various care settings are beneficial (Perell et al., 2001)
 - Functional assessment is important for predicting falls (Gates et al., 2008)
 - Targeting specific risk factors was found to reduce the number of falls in the older adult (Healey et al., 2004)





Fall risk assessment/screening

Fall risk screening questions

- Does the patient present with a fall?
- Has the patient had >2 falls in the last 12 months?
- Does the patient report having trouble with walking/gait and/or balance?





Multifactorial interventions

- Multiple articles support the utilization of multifactorial interventions that target specific risk factors
 - Specific targeted risk reduction strategies can help prevent falls in the hospital (Cameron et al., 2010 & Oliver et al., 2010)
 - Multifactorial interventions aimed at falls prevention are beneficial (Gillespie et al., 2009)



Hospital algorithm for the prevention of falls in older persons on an acute care unit Adapted Healthcare encounter by Evaluate gait & balance by nurse older adult (>65) in the (TUG test) hospital acute care setting. algorithm Patient less than 65 proceed to step 7. esults of TUG test. Falls screening questions Fail:>14 sec--1. Did the patient present with a No Pass:<14 sec--2. Has the patient had >2 falls in last 12 months? 3. Does the patient report having difficulty with walking or Yes balance? Initiate recommendation to Yes to the Yes any one of physician for a PT referral the screening Determine multi-factorial fall risk Assign fall risk category- a thru g, all that apply. No a. Age > 65 b. Fall History Medications New medications patient e. Mobility issues Yes Gait, balance and walking difficulties report a Muscle weakness single fall in f. Mental status the past 12 Neurological impairments g. Equipment · IV, compression devices, wound VACs, No Page 4 of Handout Education upon discharge to include revisiting the educational brochure Reassess at next visit. with reinforcing discussion. If applicable- Fall risk will be noted on Minimize medications medication reconciliation with Treat vision impairments instructions for patient to take Manage postural hypotension educational pamphlet to next Manage heart rate/rhythm PCP/other LIP visit for discussion. abnormalities Vitamin D supplementation · Manage foot/footware problems

Adapted from the Summary of the updated American Geriatrics Society/British Geriatrics Society by American Geriatrics Society, 2011, *Journal of the American Geriatrics Society*, 59(1), p. 150. Copyright 2010 by American Geriatrics Society. Adapted without permission.



Implementation setting

- UT Southwestern Medical Center located in Dallas, Texas.
 - Two University Hospitals with a total of 450 beds
 - University Hospital- St Paul
 - -3 South





Implementation

Project development

- Adapted algorithm
 - Education for RN mgr, RN coordinators, and staff
 - Education on Timed Up and Go (TUG) test
- Survey of the nurses
 - Evaluation of adapted algorithm

Fall prevention brochure

Already in use

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Project Results: Participants

- Patients over the age of 65 admitted to the pilot unit between February 1, 2013 and March 1, 2013
 - Excluded surgical patients

- Nurses on the pilot unit
 - Total of 30 full-time RNs
 - 23 out 30 completed the survey (77%)





Project Results: Evaluation

- Outcome measures
 - Number of falls
 - Pre project 2
 - Post project 1
 - Fall rate
 - Pre project 2.5 falls per 1000 patient days
 - Post project 1.2 falls per 1000 patient days
 - Nurse survey





Survey Results

Question	Completely disagree	Disagree	Neutral	Agree	Completely agree
Did you receive sufficient education on the use of the adapted algorithm?	0%	8.7%	8.7%	60.9%	21.7%
Do you feel the TUG test is simple to perform?	0%	0%	4.3%	52.2%	43.5%
Do you feel the adapted algorithm is a beneficial tool?	4.3%	4.3%	17.4%	47.8%	26.1%
Did you have difficulty following the adapted algorithm?	17.4%	65.2%	8.7%	8.7%	0%
Are you comfortable answering any questions the patient may have about preventing falls both in the hospital and at home?	0%	0%	0%	60.9%	39.1%

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Questions and Comments



Jeffrey Williams, DNP, RN, CCRN, CCNS
Texas Woman's University
Dallas, TX 75235

jwilliams57@twu.edu





