Fall Prevention Algorithm for the Older Adult Population: A DNP Project Utilizing Evidence-Based Practice and Translational Research

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Disclosure / Objectives

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Nothing to disclose- No monetary support, no sponsorships, and no commercial support.

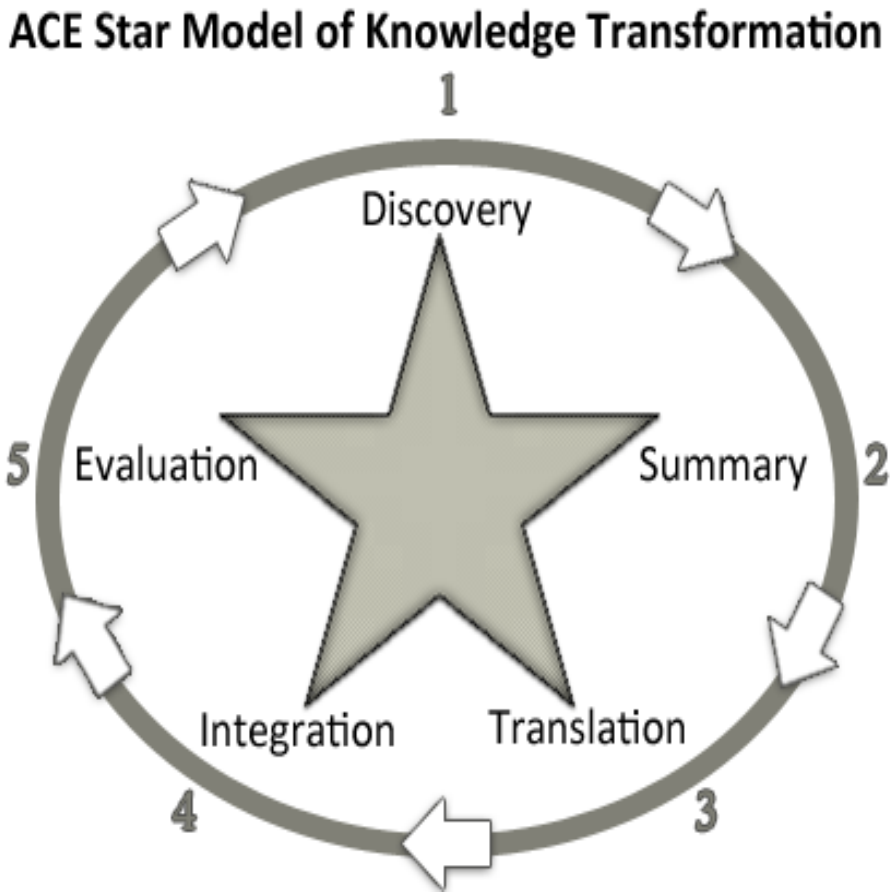
1. Identify how translational research can be utilized for implementing evidence-based practices.

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



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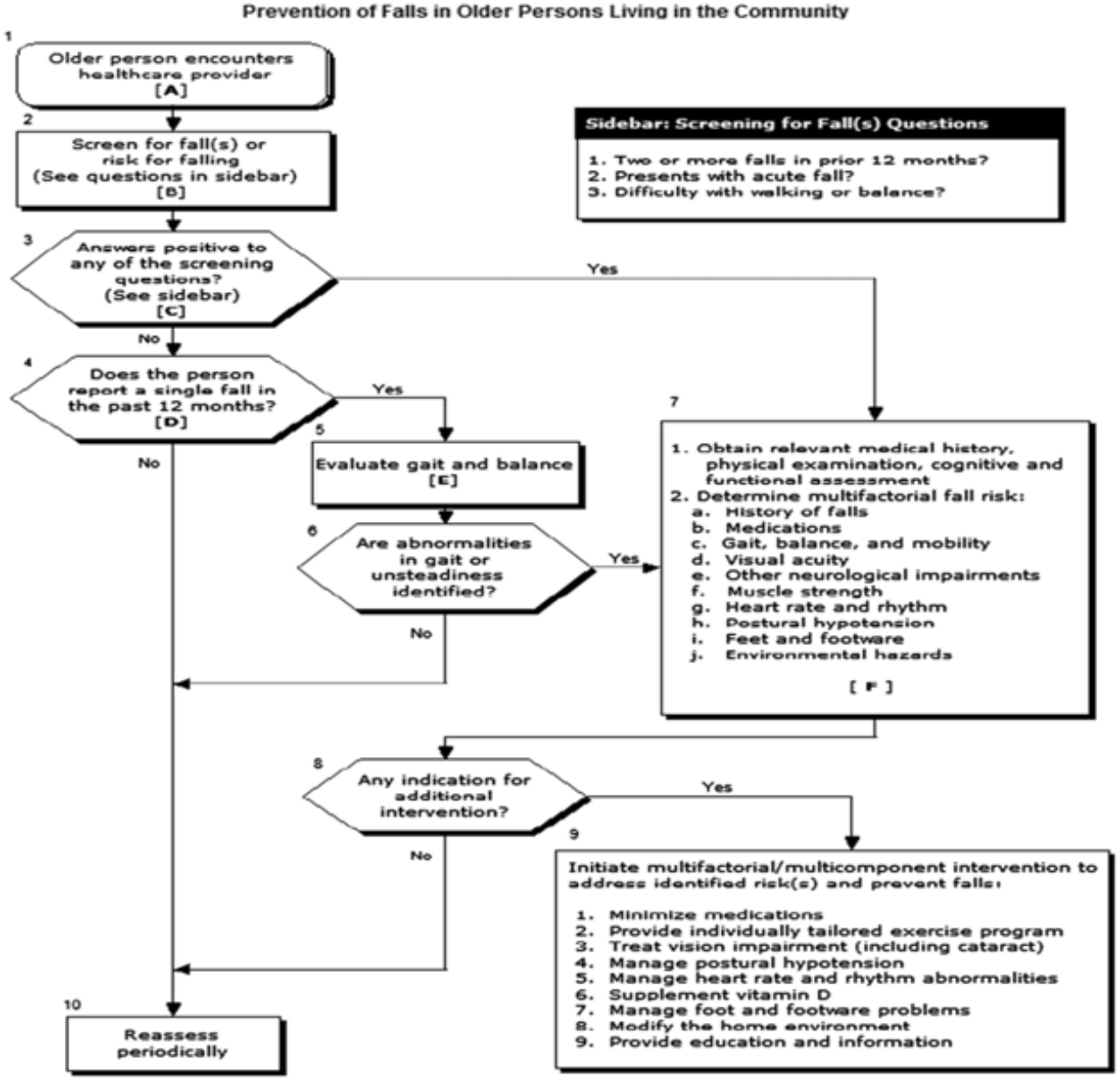
From *ACE Star Model of EBP: Knowledge Transformation.* By K. Stevens, 2004, Academic Center for Evidence-based Practice. The University of Texas Health Science Center at San Antonio. Copyright 2004 by Academic Center for Excellence. Reprinted with permission

Original algorithm



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From The summary of the updated American Geriatrics Society/British Geriatrics Society clinical practice 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)

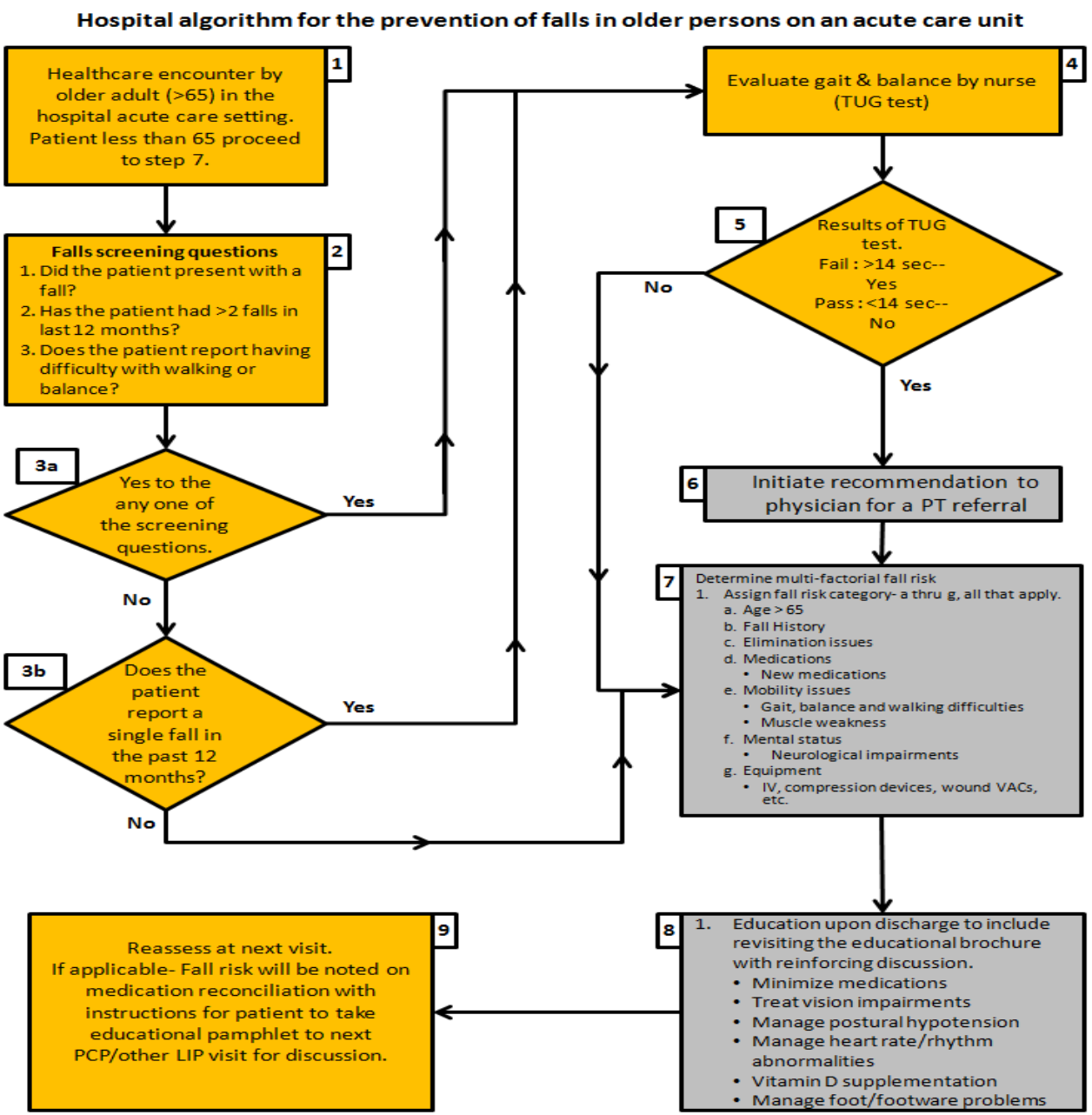
Fall risk assessment/screening

- 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)

Adapted algorithm



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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

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