

# **Development and Evaluation of a Nurse Practitioner-Directed Fall Prevention Initiative for Older Adults in a Level One Trauma Center**



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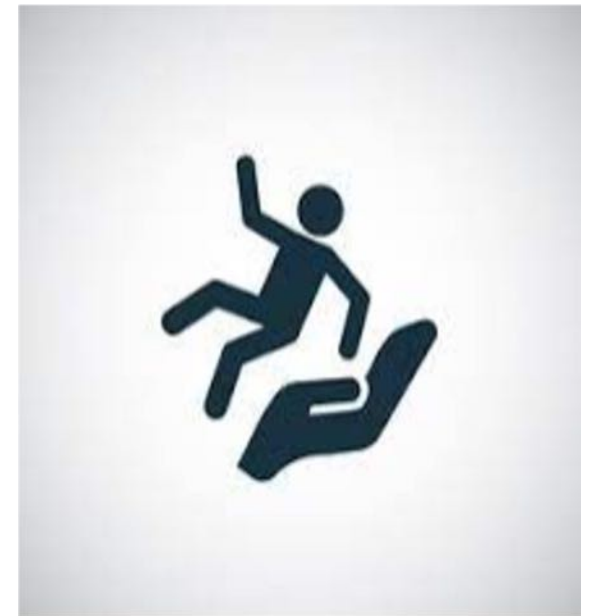
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# Introduction

- Falls cause injury and mortality
- High risk for elderly patients
- Falls cause huge economic burden
- Fall management initiatives are ineffective
- Falls prevalent despite innovative measures

# Problem Description

- Nurses responsible for patients' safety
- Nurses lack adequate fall knowledge
- Urgent need for nurse preparedness
- Expected increase in fall incidence
- STEADI toolkit effectively prevent falls



# Available Knowledge/Review of Literature

- Risk factors for patient falls
- Nurse's knowledge on fall prevention
- Training nurses on fall prevention
- Effectiveness of STEADI toolkit
- STEADI reliability in fall assessment

# Rationale/Theoretical Framework

- Health Belief Model (HBM) framework
- Six fundamental principles for HBM
- Dependent variable is patient falls
- Independent variable is STEADI toolkit
- Assumption is STEADI reduce fall

# Purpose

- To implement STEADI assessment tool
- To prevent older adults falls
- To assess fall prevention strategies
- To integrate strategies in emergency care
- To educate nurses on falls



# Context

- Study setting is Lincoln Hospital
- 347 bed capacity, 144,000 ED visits
- Active preventive measures for fall
- Probable barriers for EBP implementation
- Stakeholders: Patients, nurses, insurance companies

# Ethical Considerations

- Approved by university review board
- Organization permission from hospital management
- Participants signed a consent form
- Personal details discretion was guaranteed
- Dataset privacy and security guaranteed





# Intervention

- Intervention: The STEADI toolkit
- Fall risk assessment, treatment and referral
- Applicable in various healthcare settings
- Pre and post intervention implementation
- Reduction in patient falls measure

# Data Analysis

- Frequency statistics examined demographic data
- Descriptive statistics examined intervention data
- Pre-test and post-test statistics results
- STEADI analyzed by independent *t*-test
- Microsoft excel used for analysis

# Results

## Pre- and post-implementation falls

	Month	Number of Falls	Did not fall	Total
<b>Pre-Implementation</b>	<b>Jul-2021</b>	<b>132</b>	<b>134</b>	<b>246</b>
	<b>Aug-2021</b>	<b>126</b>	<b>131</b>	<b>257</b>
	<b>Sep-2021</b>	<b>105</b>	<b>107</b>	<b>212</b>
<b>Post-Implementation</b>	<b>Oct-2021</b>	<b>117</b>	<b>121</b>	<b>238</b>
	<b>Nov-2021</b>	<b>72</b>	<b>142</b>	<b>214</b>
	<b>Dec-2021</b>	<b>10</b>	<b>186</b>	<b>196</b>

# Results Cont.'

## Independent *t*-test results

	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
<b>Patient falls</b>	1.9617	1361	0.000

# Discussion

- Increased confidence/attitudes on fall prevention
- Attitude influence fall prevention measures
- STEADI improves fall risk screening
- Improved screening after STEADI adoption
- STEADI addresses fall prevention barriers

# Limitations

- Biased due to hospital setting
- Reluctance due to organization culture
- Medical practitioners' characteristics and experience
- Self-reported risk factors biasness
- Lack of knowledge on falls

# Plan for Sustainability

- Present finding to facility managers
- Provision of requisite resources support
- Encouraging nurses on personal initiatives
- Inclusion of STEADI toolkit
- Integrating intervention during patient treatment

# Implications for Advanced Nursing Practice

- STEADI leads to fall reduction
- STEADI as organization standard procedures
- Support factor enable effective implementation
- Professionals should be STEADI knowledgeable
- Critical success factors affect implementation



# Conclusions

- STEADI implementation reduce fall prevention
- STEADI implementation increases nurses' knowledge
- STEADI improve attitude towards falls
- STEADI increase patient fall screening
- Healthcare providers should implement STEADI

# Plan for Dissemination

- Organization leadership for quality improvement
- New York State Nurses Association
- Nigerian Nurses Association of USA
- Clinical scholarship and analytic methods
- Health care policy for advocacy

# Thank You

- I acknowledge my DNP project advisor
- I acknowledge my DNP project team
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- I acknowledge my facility nurse manager



# How Project Met the AACN DNP Essentials

- Scientific underpinnings for nursing practice
- Organizational leadership for quality improvement
- Utilization of EBP analytical methods
- Inter-professional collaboration to improve outcomes
- Clinical prevention and population health

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