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## Prevalence and Prevention of Pressure Injuries in Residents Over the Age of 65

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Bao, Trista, Joe

# **Interventions for Pressure Injuries**

# Expectations

Population

How we chose the topic

Data from the facility

Causes of PI

Risks for PI

Scales and assessment

Aftermath and consequences

Intervention and supporting data

# Population

People in long-term  
nursing facilities that are  
above the age of 65



# Choosing a Topic

Debilitating injury

Staff suggested

Older residents are at higher risk

Long term stays have higher risk

# Risks

Nutritional  
Status

Immobilization

Pressure on  
bony  
prominences

Poor  
perfusion

Moisture /  
Dryness

Older Age

# Data at the Facility



4 PIs developed in 2023



3 new ones in 2024



Many residents with high  
risk



Lack of procedure for high-  
risk scores

# Identifying Causes

- Lack of action regarding high-risk Braden scores
- Lack of intervention after score
- Study in Italy nursing home 50% of residents who acquired pressure ulcers scored high risk in risk assessment (Elli et. al, 2022)
- 80% scored medium to high risk (Elli et. al, 2022)
- Not enough daily moisturizer use
- Lack of repositioning
- Lack of nutrition



# Braden, Norton, and Waterlow Scales

Norton was  
most  
successful

Braden was  
second most  
successful

Waterlow  
was least  
effective

(Park et. al, 2015)



## **RISK ASSESSMENT**

- Norton scale scored best with a 0.76 sensitivity score compared to Braden with a 0.72 and Waterlow with a 0.53 (Park et. al, 2015)
- Used portions of Norton to enhance the Braden Score

## **AFTERMATH**

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Pain – Increased Behaviors

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Infection

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Sepsis – Death

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Expenses – Resources

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Time – Nurses and Physicians

# Info Regarding Consequences

- Financial costs are staggering for facility and residents, when there is an estimated 11 billion dollars spent per year on pressure injury treatment (Park et. al, 2015)
  - Over 3 million long-term residents acquire a pressure injury per year (Sugathapala et. al, 2023)
- 20,300 deaths were related to pressure ulcer injuries in 2017, that number was 13,700 in 1990 (Chung et. al, 2022)
- Pressure Injuries occur at a higher rate in nursing homes than hospitals (Sugathapala et. al, 2023)
- 72% of pressure injuries occur in older adults (Park et. al, 2016)



## **PROPOSED INTERVENTIONS**

Act on and create interventions for high Braden Scores (creating a pressure injury high risk bundle)

- Daily Moisturizer
- Proper Nutrition
- A specialty mattress or other support surface
- Extra attention to residents with high scores regarding repositioning
- Skin inspection thoroughly done

# REPOSITIONING



Adherence is key



Staff given education/projects and adherence increased (Dobre et. al, 2023).



Supine and Prone (Harris et. al, 2023)



Q 2 HR (Harris et. al, 2023)



Releases Pressure (If able)

# Supporting Data

- The heel, sacrum, and foot are the most common reported places for pressure injuries to occur (Sugathapala et. al, 2023)
- A 27% decrease in pressure injuries when resident is repositioned every 4 hours instead of 6 hours (Harris et. al, 2023).
- There is continued benefit and results found a continued decrease in repositioning every 3 hours and 2 hours compared to 4 hours (Harris et. al, 2023)
- Many facilities in a study were found to have compliance of pressure injury prevention of 0-82% (Dobre et. al, 2023)
- Applying moisturizer twice daily to older adults in the sacral area can reduce pressure ulcer/skin tear occurrence up to 50% (Bhatt, 2023)

# Barriers and Resolutions

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Staffing - shortage

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Resident Refusal – increase education

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Possible lack of staff education  
– training and meetings

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