

# Effects of Swing Bed Services on Risk- Adjusted Mobility in a Rural Nebraska CAH

KEARNEY COUNTY HEALTH SERVICES

KENDRA BROWN MSN, RN, CNO; KATHY MIDDLESWART MSN, RN  
DIRECTOR OF QUALITY; MARY LUTKEMEIER, PT

# Objectives:

- ▶ Discuss mobility decline in hospitalized patients globally.
- ▶ Discuss the impact of increased mobility for the patient and related care services upon discharge.
- ▶ Discuss Interventions contributing to increased mobility scores at Kearney County Health Services.

# Mobility Decline in Hospitalized Patients:

▶ **Bedrest** has historically been utilized as a tool for “healing”

- 10 days of bedrest is the equivalent of **10 years** of muscle aging for someone over the age of 80.
- 1 week of bedrest equates to a 10% loss in strength.
- Building muscle strength back takes **twice as long** as it takes to deteriorate.

# Mobility Decline in Hospitalized Patients:

## ► **Clinical issues** due to excessive bedrest:

- Weakened muscular strength/ stamina
- Bone density decreases when muscles are no longer bearing weight.
- Hypoventilation can lead to decreased oxygenation and pneumonia.
- Peripheral edema is more difficult to remove
- Embolism may form in legs/ lungs
- Pressure Injuries



# Impact of Mobility:

## Decreased Mobility in Hospitals

### ► Suboptimal Care

- Hospitalized older adults spend greater than 80% of their time lying in bed.<sup>7</sup>

### ► Risk of Functional Decline,

- both immediately and 30 days post-discharge<sup>1</sup>

### ► Increased Length of Stay

- an average of 8.72 days compared to 4.96 days in one study<sup>2</sup>

### ► Decreased Quality of Life

- Low physical mobility is linked to being 34 times more likely to die and 6 times more likely to be institutionalized<sup>6</sup>



# Impact of Mobility:

## Increased Mobility In Hospitals

- ▶ Saves money
  - on average \$939 per Medicare Beneficiary<sub>3</sub>
- ▶ Decreased Healthcare-Acquired Pneumonia
  - 3.6% of an intervention group acquiring pneumonia, compared to 10% of control group.<sub>4</sub>
- ▶ Reduces discharges to Nursing Homes
  - 92% of patients in a mobility program went home compared to 74% of control<sub>5</sub>





# Impact of Mobility:

## #EndPJparalysis- case study in Nottingham, England<sub>8</sub>

### Interventions

- Getting Dressed instead of staying in gown
- Eating out of the bed/ room
- Activities: board games, having hair/ nails done, arts and crafts
- Encouraging enjoyment and participation

### Outcomes

- Patient statements that they feel better wearing their own clothes.
- 37.5% Reduction in falls.
- 55.6% reduction in pressure ulcers.
- 80% reduction in complaints about nursing care.



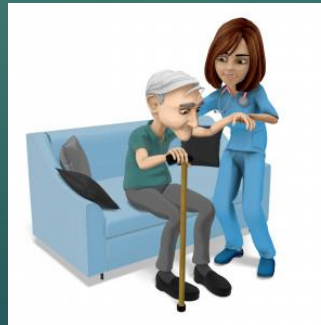
# Impact of Mobility: Kearney County Health Services

## Interventions

- Staff Education
- Patients dressed and up to chair for all meals
- Setting a target number of times for walking/ doing exercises daily with patients and family if present.
- Ensuring that family understood the goal of swing bed and increasing mobility.

## Outcomes

- Increased buy-in from staff regarding the importance of mobility.
- Risk-adjusted mobility increased from a baseline of 15.4% prior to the study to 31.7% after 1 quarter of intervention.





# Impact of Mobility: Kearney County Health Services

## Interventions

- Therapy entering orders for nursing staff specific to the patient's needs/ goals.
- Posting Mobility goals, first on white boards, then on electronic care boards for patients and family members to see at all times.
- Therapy discussing with patients what the "goal for the day" is when entering them into the electronic care board– including the patient and family in the deciding process.



## Outcomes

- The orders "triggered" nursing staff and ancillary staff to encourage the patient to ambulate or do exercises several times a day instead of just when therapy was with the patient.
- The increased number of people accountable for mobility increase the number of time the patient participated in activity.
- Family members ask about where the patient is in their "goal" when visiting.
- **Risk-adjusted mobility increases to 64% at the end of the second quarter.**

# Impact of Mobility: Kearney County Health Services

- ▶ Increasing the discussion between nursing staff and therapy regarding mobility help staff to set smaller, more frequent, and more achievable goals, even throughout the same day.
- ▶ The more discussion we had regarding mobility, the more motivated patients became.
- ▶ Encouraging patients and families to be a part of the discussion and goal-setting increased their buy-in and enthusiasm about meeting the goals.



# Resources

1. Zisberg, A., Shadmi, E., Gur-Yash, N., Tonkikh, O. & Sinoff, G. (2015) Hospital-associated functional decline: The role of hospitalization processes beyond individual risk factors. *Journal of the American Geriatrics Society*, 63(1), 55-62. <http://dx.doi.org/10.1111/jgs.13193>
2. Padula, C.A., Hughes, C., & Baumhover, L. (2009, October/December). Impacts of a nurse-driven mobility protocol on functional decline in hospitalized older adults. *Journal of Nursing Care Quality*, 24(4), 325-331. <http://dx.doi.org/10.1097/NCQ.0b013e3181af4f79b>
3. Ghimire, E., Colligan, E.M., Howell, B., Perlroth, D., Maffufo, G., Rusev, E., & Packard, M. (2015). Effects of a community-based fall management program on Medicare cost savings. *American Journal of Preventive Medicine*, 49(6), e109-e116. <http://dx.doi.org/http://dx.doi.org/10.1016/j.ampere.2015.07.004>
4. Stolbrink, M., McGowan, L., Saman, H., Nguyen, T., Knightly, R., Sharpe, J., ... Turner, A. (2013, December 27). The early mobility bundle: A simple enhancement of therapy which may reduce incidence of hospital-acquired pneumonia and length of hospital stay. *Journal of Hospital Infection*, 88, 34-39. <http://dx.doi.org/http://dx.doi.org/10.1016/j.jhin.2014.05.006>
5. Hastings, N., Sloane, R., Morey, M., Pavon, J.M., & Hoenig, H. (2014, November). Assisted early mobility for hospitalized older veterans: Preliminary data from the STRIDE program. *The American Geriatrics Society*, 62(11), 2180-2184. <http://dx.doi.org/10.1111/jgs.13095>
6. Brown, C. J., Friedkin, R. J., & Inouye, S. K. (2004). Prevalence and outcomes of low mobility in hospitalized older patients. *Journal of the American Geriatrics Society*, 52, 1263-1270. doi:10.1111/j.1532-5415.2004.52354.x
7. Brown, C. J., Redden, D. T., Flood, K. L., & Allman, R. M. (2009). The underrecognized epidemic of low mobility during hospitalizations of older adults. *Journal of Rehabilitation Research & Development*, 45, 551-558. doi:10.1682/jjrd.2007.06.0086
8. NT Contributor. (May 21, 2018). Reducing the effects of immobility during hospital admissions. *Nursing Times*. <https://www.nursingtimes.net/roles/hospital-nurses/reducing-the-effects-of-immobility-during-hospital-admissions-21-05-2018/>
9. [www.endpjparalysis.org](http://www.endpjparalysis.org)