LiftSeat
no-lift solutions

WHITE PAPER

Clinical Guidance on the Utilization of LiftSeat in the Prevention of Toileting-Related Falls in Long-Term Care Facilities

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Background

Falls among long-term care residents are common; up to 75% of residents' experience one or more falls annually (1). Almost half of all falls are elimination related (i.e., a fall occurring during an activity related to elimination or need to toilet) (2). The majority of falls take place during unassisted toilet and bedside commode transfers. Toilet-related falls are associated with significant physical and psychological complications, including: injury (e.g., hip and other fractures); immobility resulting in muscle weakness, functional disabilities, and risk for further falls; and psychological distress (e.g. depression, fear of falling) (2)

Aside from potential resident harm, assisted toilet transfers can lead to caregiver injury. Handling tasks, often performed manually and repetitively, can require high physical demands due to the difficulty of lifting and moving a resident because of the weight of the resident (i.e., especially, the increasing number of obese and bariatric or extremely obese residents), combativeness, and tendency to fall or lose balance. Moreover, performing resident handling in the confines of small bathrooms and/or bedrooms cluttered with healthcare equipment and/or furnishings works against the caregiver being able to use good body mechanics. As a result, manual handling tasks involving residents are associated with an increased risk of pain and injury to caregivers (e.g., nurses, nursing aides, physical and occupational therapists, transporters, etc.), which can be severely debilitating. Occurring in up to one-third of caregivers, some of the most common musculoskeletal injuries associated with resident handling include damage to muscles, ligaments, tendons, nerves, bursa, joints, and cartilage, including intervertebral discs. For the nursing home, caregiver injuries often result in economic consequences consisting of increasing workers' compensation and other lost time costs as well as shortages of needed caregiver staff.

The purpose of this article is to provide long term care nursing staff with practical guidance on the utilization of LiftSeat in helping to prevent falls and minimize caregiver injury.

Assessing the Need for LiftSeat

A "best practice" clinical approach to assessing the need for utilizing LiftSeat consists of three steps, outlined on the following pages.

Step 1: Assessing Fall Risk

There are a number of risk factors that can increase the risk of falling, several of which also increase the risk of falls and injurious falls during toilet transfers. Consider these risk factors when assessing the fall risk of a resident:

- ❒ Recent falls (a history of falls is the best predictor of future falls)
- ❒ Lower extremity dysfunction (arthritis; muscle weakness; impaired sensory function)
- ❒ Unsteady gait/balance (stroke; Parkinson's disease, etc.)
- ❒ Elimination problems (excessive night time urination; incontinence)
- ❒ Altered cognition (dementia; depression; agitation)
- ❒ Fear of falling (leads to over-precaution, fear of walking and/or transferring, and consequently, weakness, poor balance, and increased fall risk)
- ❒ Polypharmacy (4 or more prescription drugs)
- ❒ Medication side effects (especially drugs that affect central nervous system, such as sedatives and tranquilizers)
- ❒ Mobility impairment (impaired bed, toilet, and chair/wheelchair transfers)
- ❒ Exhibiting unsafe behavior (overestimation of one's abilities to self-transfer and ambulate, poor safety awareness, desire not to "bother" staff for assistance, and resistance to care).
- ❒ Hazardous environmental conditions interfering with safe mobility.

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Step 2: Assessing Fall Risk During Toilet Transfers

A safe toilet height is achieved when a resident is able to sit on the toilet with both feet planted firmly on the floor and is able transfer on and off the toilet without any difficulty or balance loss. Consequently, observing a resident's ability to transfer safely and independently from toilet can be used to assess fall risk. Any observed impairment in toilet mobility or transfers is a strong predictor of fall risk. This is accomplished by asking residents to perform a number of simple toilet mobility maneuvers and observing whether or not they can accomplish these activities safely and independently.

Despite the presence of multiple risk factors, residents who are able to complete the toilet mobility maneuvers independently and without difficulty are generally considered to be at low fall risk from the toilet. Conversely, residents demonstrating one or more impaired maneuvers have poor toilet mobility and are at high risk, and may be appropriate candidates for a Lift Seat.

Residents at greatest risk for injurious falls and most suitable for a LiftSeat include any resident with:

- Unsteady balance
- Impaired mobility
- Previous falls from toilet
- Previous injurious falls from toilet

In order to detect changes in toilet mobility and fall risk, reassessment of toilet mobility should be completed:

- Following a fall
- Change of condition
- Change of medication
- Change of cognition

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Performance-Oriented Toilet Mobility Screen

Ask the resident to perform the following maneuvers:	OBSERVATION	
	Independent	*Impaired*
Transfer from the toilet	❒ Able to rise from seated position in smooth, controlled movement ❒ Feet do not slide away on the floor ❒ Grab bars used to perform maneuver ❒ Grab bars support safe transfer	❒ Unstable rising from seated position (requires several attempts to get up; falls back onto toilet)* ❒ Feet slide away on the floor ❒ Grab bars used to perform maneuver ❒ Grab bars do not support safe transfer **Resident has difficulty getting up, and lacks strength, balance is poor, grasps on to bathroom fixtures, or requires a support person for assistance*
Stand in place	❒ Steady, able to stand without balance loss after getting up from toilet ❒ Grab bars used to perform maneuver ❒ Grab bars support safe transfer	❒ Unsteady standing balance after getting up from toilet *Resident cannot stand without assistance*
Transfer back onto toilet	❒ Able to sit down on toilet in smooth, controlled movement ❒ Feet do not slide away on the floor ❒ Grab bars used to perform maneuver ❒ Grab bars support safe transfer	❒ Unable to operate *Resident is reluctant to use, or doesn't use nurse call when appropriate*
Operate nurse call system	❒ Able to operate	❒ Unable to operate *Resident is reluctant to use, or doesn't use nurse call when appropriate*

Step 3: Assessing the Need for LiftSeat

It's important to recognize that the "performance-based toilet mobility screen" is a quick and simple evaluation of risk. Therefore, a failed toilet mobility screen should be followed-up with a physical and/or occupational therapy referral for further assessment regarding the utilization of LiftSeat.

Recommended LiftSeat Assessment (*)

1. Relevant Health Information
Current diagnosis, relevant past medical history, relevant symptoms / factors that may affect physical or cognitive abilities, mood, motivation.

2. Medication Considerations
Side effects, effect on cognitive and physical abilities, is there a time when the person is more able / less able?

3. Tiredness / Fatigue
When is the person more / less fatigued? Impact on abilities.

4. Identified Fall Risk Factors

5. Measurements
Height _____

Weight _____

6. Vision
Glasses needed, cataracts, visual field loss – hemianopia (right or left), visual acuity?

7. Hearing
Level of impairment, both ears. Aids used?

8. Cognition
Attention, memory / recall (visual and verbal), self awareness, self-inhibition, planning, problem solving, insight, sequencing, apraxia, safety and judgment.

9. Ability to Understand / Follow Instructions
Can the person follow 1, 2, 3 step instructions?

10. Behavior / Ability to Cooperate
Are they confused, uncooperative? Unpredictable, impulsive, anxiety, fear of movement?

11. Communication
Expressive and receptive abilities, understanding of non-verbal communication, use of English, ability to follow verbal instructions.

12. Upper Limb Function
Active / passive range of movement restrictions, high/low/fluctuating tone, pain, sensation (hypersensitive or impaired), associated reactions, injuries, control, strength, ability to weight bear, splints, is one side affected, which side is dominant, contracture, deformities, spasms, involuntary movement.

13. Lower Limb Function
Active / passive range of movement, high/low/fluctuating tone, pain, sensation, associated reactions, injuries, control, strength, ability to weight bear, splints, is one side affected, which side is dominant, walking ability, contracture, deformities, spasms, involuntary movement.

14. Sitting Balance
Ability to sit unsupported, awareness of midline, righting reactions, supports required, is one side affected / weak, ability to change position. Ability to maintain position.

15. Postural abnormalities
Kyphosis, scoliosis, other spinal deformity

16. Weight Bearing
Ability to weight bear with both upper and lower limbs, ability to stand, is one side weaker?, aids used, assistance required, time able to weight bear.

17. Mobility
Can they walk? How far? Do they need an aid / assistance? Any difficulties with balance?

18. Perception
Spatial awareness, figure-ground, position in space, depth and distance perception, constructional abilities, inattention / neglect, body image, body scheme – the position of the body and relationship of body parts, right / left discrimination.

19. Environmental Considerations

20. Individual Capabilities (of caregiver(s) assisting)
Level of knowledge / training in procedure, physical restrictions which may affect ability to assist, pregnancy or other health problems, previous injuries, large height discrepancy, poor strength, restrictive clothing / personal protective equipment.

(*) LiftSeat is best for residents with stroke, Parkinson's disease, diabetes, arthritis, muscle weakness and bariatric size with reduced strength and balance demonstrating impaired toilet/bedside commode transfers and fall risk and/or failed toileting and equipment strategies.

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Achieving Success with LiftSeat

There are a number of steps that long term care facilities can take to achieve success with LiftSeat:

APPOINT A "LIFTSEAT" COORDINATOR

The coordinator's tasks may include:

- Familiarize staff with LiftSeat and its role in assisting mobility and preventing falls.
- Provide ongoing education of staff and training of new staff with respect to LiftSeat.
- Oversee staff utilization and compliance with LiftSeat.
- Collect data and evaluate resident outcomes with respect to LiftSeat.
- Provide supportive feedback to staff regarding use of LiftSeat.
- Maintain LiftSeat and serve as the main "connection" with LiftSeat vendor.
- Maintain and update LiftSeat guidelines, policies and protocols.
- Provide administration with feedback on LiftSeat (i.e., LiftSeat effectiveness, numbers of LiftSeats needed, etc.).

PROVIDE EDUCATION

An ongoing staff in-service regarding LiftSeat is essential. The purpose of education is to increase staffs' knowledge and skills in identifying residents at risk for toileting falls and the appropriate use of LiftSeat. Education should occur during facility orientation and, subsequently, on a regular basis (i.e., audits of the care process can be used to detect any deficient practices and identify topics for in-service). Housekeeping should be in-serviced as well with respect to LiftSeat.

References

(1) Rubenstein LZ, Josephson KR, Robbins AS. Falls in the nursing home. Ann Internal Med. 1994; 121:442-451.

(2) Tideiksaar R. Falls in Older Persons. 3rd ed. Baltimore, Md: Health Professions Press; 2002.